THE CULTIVATOR.

NEW "TO IMPROVE THE SOIL AND MIND." SERIES.

VOL. IV. ALBANY, DECEMBER, 1847. No. 12.

SKETCHES OF MASSACHUSETTS FARMING

DURING a short excursion to Massachusetts, in the month of October last, we had a better opportunity of seeing a portion of the valley of the Connecticut river north of Springfield, than we ever had before. Having attended the cattle-shows at Pittsfield and Springfield, we spent a few days very pleasantly in visiting some of the farms from Springfield to Greenfield; and after being present at the show at Northampton, we passed down the river and attended that at Hartford, Ct.

CULTIVATION WITHOUT FENCES.—The attention of a person not acquainted with the customs of Massachusetts, is attracted by the large amount of land in some neighborhoods, lying as "commons," or unfenced. Along the Connecticut, between the intervale or "meadows" and the hills, on each side of the river, there are tracts varying from two to six or eight miles in width, called *plains*. The soil is sandy, but varies in lightness from that which is blown about by winds to that which is called sandy loam. The natural growth varies with the soil, being in some instances only scrub-oak and small bushes, in others white and pitch pine, and in others chestnut, and other hard-wood trees. A large portion of this land is unenclosed, yet there are thousands of acres under cultivation, and some of it produces fair crops of rye, Indian corn, buckwheat, and potatoes. A law of the state prohibits live-stock of all kinds from running at large; and so strictly is the law observed, that not an animal is seen in the highway unless under the care of a keeper; and crops grown on the commons are considered equally as safe as though they were surrounded by the best fences. We passed many pieces of corn and other crops, which had received no injury, and it was evident that none was feared.

Heretofore this plain land has not been deemed of much value. Until within a few years, that which was situated not more than two or three miles from the principal business street in Springfield, could have been bought at from three to five dollars per acre. But latterly it has been found that under suitable management this land may be greatly improved, and that by proper cultivation it will afford good profits. Its value is therefore now reckoned higher by a hundred or two hundred per cent. than it was ten years ago.

Mr. HORATIO SARGENT, of Springfield, and other owners of this land, have been successful in its improvement. That which is in its natural state, or which has not been cropped, is most readily brought into profitable condition. The trees or bushes are cut off, the land plowed and got into clover as soon as possible. Plaster is sown on the clover at the rate of from sixty to a hundred and twenty pounds per acre. The clover is mowed or pastured the first year, and the second year the principal part of the growth is left on the ground—the land plowed and sowed to rye, or left till the following spring and planted to corn or potatoes. After one or two crops have been taken, it is again put in clover, a dressing of plaster given, and the clover continued as long as it produces well. Sometimes grass seeds are sown, and the land pastured for several years. By this course it is found that the land does not deteriorate, and by the addition of only a light dressing of manure when it is plowed, it actually improves.

Land of this kind which has formerly been cropped, and called worn out, is rapidly improved by manure, ashes, clover, and plaster. Considerable of it has been brought up in this way. It is found best, we were told, to apply the manure in the form of well rotted compost, and to spread it evenly over the surface, and only cover it slightly. If animal manure is applied in an unfermented state, it seems to "burn away," and render the soil dry without doing much good. But when made into compost, and applied as above-mentioned, it rather attracts moisture, and renders the soil more cohesive.

CULTIVATION OF TOBACCO.—The culture of tobacco in the valley of the Connecticut, has, within a few years, become an object of considerable importance. The variety here produced is known in the market as "Connecticut Seed-Leaf," and it usually brings double the price, or more, of the tobacco grown in Virginia or Kentucky. To give a profitable crop it requires pretty rich land—though the sandy soils, manured at the rate of ten to twenty common two-horse or ox loads per acre, produce well. With good management the usual yield is from 1,500 to 2,000 pounds per acre, of marketable tobacco, and the average price may be said to be seven to eight cents per pound.

Mr. SARGENT, of Springfield, and Messrs. WELLS and PAOLI LATHROP, of South Hadley, are considerably engaged in the tobacco culture. The former had seventeen acres the past season. At the above rates of yield and price, which it will probably equal, it will give an average return of $105 to $160 per acre.

With the course that is here pursued, tobacco is by no means an injurious crop to the soil; on the contrary it is found to be an ameliorating one. The liberal manuring and clean cultivation which it is necessary to bestow on the tobacco, fits the soil admirably for other crops; and it is found that wheat and other grains and grass flourish better where tobacco forms a part of the rotation, than where that plant is not cultivated. Messrs. LATHROP mentioned an instance of their having put $36 worth of manure on an acre and a hundred rods of land, which they planted with tobac-

co. They got a ton of tobacco, which sold for $160. Then sowed the land to wheat and got 30 bushels. The next crop was hay, and gave, at two cuttings, four tons

The stalks of tobacco, after the leaves have been taken off, are scattered over the ground and plowed in, or placed in the manure heap to rot. It is thought they possess considerable fertilizing properties. It is known that the ashes from them contain a large proportion of potash. We are told that where two or three stalks are left on grass-ground, their effect is very visible in the rank growth of the grass around.*

FARMS.—Mr. SARGENT'S farm consists of several detached pieces. He has only some eight or ten acres about his residence, and this is becoming too valuable for building lots to be cultivated. About a mile up the river he has 63 acres of excellent intervale. Besides this he has about 40 acres of "plain," which he is improving to great advantage, and a tract of 40 to 50 acres of pasturage at East Longmeadow. The crops cultivated on the river land are chiefly tobacco (of which we have spoken above,) and Indian corn. He usually obtains from 60 to 70 bushels of corn per acre; has raised 88 bushels per acre. He devotes his pastures considerably to grazing stock for beef. He has eight three-year-old steers designed for slaughter this winter. They were in high order when we saw them, though only grass-fed. It was thought they would weigh an average of 800 lbs. dressed. Three or four of them had considerable Durham blood, and were really fine animals; $50 per head had already been offered for them.

B. B. BELCHER, Esq., has a fine situation at Chickopee Falls,—a thriving manufacturing village of about 2000 inhabitants. Mr. B.'s buildings are new, and in their situation and construction he has shown much good judgment as well as good taste. The house commands a pleasant view of the village and neighborhood. His garden, though yet too new to appear to the best advantage, is prettily laid out and handsomely ornamented with trees, shrubbery, and flowers. His farm consists of about 70 acres, and is mostly devoted to the keeping of cows for the purpose of selling milk. His barn is one of the best planned and thoroughly built that we have anywhere met with. It is 78 feet long by 44 wide, with posts 23 feet high. It is divided into two stories—the first ten feet high, and the second thirteen feet to the eaves. The cattle are kept in the lower story. The floorway is on the second story. On one side of the floorway, the bay extends to the bottom of the first story. The barn will hold 100 tons of hay, and that quantity is usually cut on the farm. At one end of the basement story there is a cellar in which vegetables are stored for feeding stock in winter. Carrots are preferred for cows. He keeps fifteen cows, besides other stock. The cows average six quarts of milk per day, beer measure, the year round. The milk is sold at four cents per quart in summer, and five in winter. The farm is kept chiefly in grass, and when it becomes necessary to break up the sward, it is done in autumn, and immediately sown again to grass on the furrow. A large portion of the farm is naturally rather a light sandy soil, though most of it is moist, and under Mr. B.'s management produces excellent crops of grass. Hay is commonly worth here $12 per ton.

Mr. B.'s cows are a good lot. Among them are several full blood Durhams from the herd of Messrs. LATHROP, of South Hadley. One of these, four years old, carried the first premium at the show at Springfield. Some of his cows of mixed blood have very good forms, and look like first rate milkers. His swine are of the Mackay breed, and some of them are fine ones, but the stock has apparently degenerated by too close breeding.

Messrs. ABEL and SUMNER CHAPIN, of Chickopee, have about 70 acres in their home farm, situated on the river, and 200 acres at Ludlow, six miles distant, besides some other out lands. This farm has long been one of considerable note. The father of the present owners, Col. ABEL CHAPIN, was a distinguished farmer, quite famous for rearing cattle of extraordinary size and fatness. He bred and reared the celebrated oxen Magnus and Maximus, which took the prizes of the Mass. So. for Promoting Agriculture, at the Brighton show, in 1817, and were considered the most extraordinary cattle which had been reared in the country. Their weight was upwards of 2000 lbs. each, dressed. The year following Col. C. exhibited another ox at Brighton, which weighed alive 2,784 lbs. These oxen were descended from the "Gore bull," presented in 1792, by the late CHARLES VAUGHAN, Esq., of Maine, to Governor GORE, of Massachusetts. Messrs. CHAPIN have now one cow and some of her offspring which show the blood and points of the above stock in a striking manner. They have several large and thrifty steers and young oxen, among which were a pair of full-blood Durhams, three years old, from the herd of Messrs. LATHROP, that are really fine.

CHESTER W. CHAPIN, Chickopee, has a farm of about 200 acres of excellent land, lying mostly on the river. He keeps twenty cows, the milk from which is sold at Cabotville. The cows are in general superior.

They are of various blood, though none are claimed as "native." Some are a mixture of the "Phœnix stock," as it is called, (which we shall describe in another place,) mixed with the Durham; and some are half Ayrshire. But taking them all together we are not certain that we ever saw a lot of the same number, which would surpass them in general appearance. —regard being had to all points which indicate a *profitable* cow.

Messrs. WELLS & PAOLI LATHROP, of South-Hadley, have a farm of 187 acres. It is within half a mile of the falls in the Connecticut, where a dam is soon to be built for the purpose of obtaining a large water-power —a power which it is calculated will be nearly four times greater than that of Lowell. The work has been commenced and is rapidly progressing, and it is expected that in the space of a few years a city will here rise that will number its inhabitants by tens of thousands. The enterprise has already had the effect to enhance the value of real estate in the neighborhood.

Messrs. Lathrop purchased this farm in 1833, at the low price of $5,600 It was supposed to be "run out," and only yielded thirty tons of hay annually. The highest estimate of its capabilities by its former owner, was, that it would keep twenty-five cows, if devoted wholly to that purpose. Messrs. L. have so increased its production that for the last ten years it has averaged a hundred tons of hay yearly, and supported from thirty-seven to forty head of cattle, with three or four horses. This improvement has been produced by no extraordinary expenditure. The first start was given by the application of plaster.

A considerable part of the farm consists of hills and knolls—frequently rather steep—which seem to have been formed by the abrasion or washing away of portions of the elevated plain to which the whole tract originally belonged. It is evidently an alluvial formation, though much older than the present "intervale."

The strata composing this plain are various in composition. A large portion of the surface, as we have mentioned in the first part of our article, is sandy, but it is underlayed, at varions depths, by strata of an argillaceous character. In some places, as on the sides

* For an account of the mode of cultivating tobacco as here practiced, see Cultivator for 1844, page 89.

of such hills as we have described, these strata crop out and form the surface soil. In all such situations, the effects of plaster are almost wonderful. Messrs. L. state that when they purchased their farm, the grass on nearly the whole of it was thin and of poor quality. The hilly portion of it was pastured, but the stock obtained only a scanty supply of "mouse-ear and poverty-grass." The application of about two bushels, or a hundred and twenty pounds of plaster per acre, soon changed the character of the herbage, and the barren hills became the finest grazing lands. Since the first application of plaster, an annual dressing of about sixty pounds per acre has been given; and this is all the land has received, in the shape of manure except what has been dropped by animals while being kept on it. The production of feed has been remarkable, and there is still no diminution, but rather an increase in its quantity. It is chiefly spire-grass, or "Kentucky blue-grass," (*Poa pratensis,*) and white clover, and is very sweet and nutritive. We have seldom seen pastures that would carry more stock per acre. The best part of them will support a cow per acre.

We were told of other instances, equally striking, of the effects of plaster on similar soil. Mr. JOSIAH BARDWELL, of South-Hadley, for several seasons summered a horse, a yoke of oxen, two cows, and a heifer, on four acres and three-quarters. He had nine acres and a half of meadow, from which he cut one year, at two cuttings, thirty-seven tons of hay. The pasture had a dressing of plaster, and nothing else, every year—the meadow had some additional manure.*

Messrs. LATHROP were able at once, by the use of plaster, to stock their farm heavily. Of course they were soon provided with a large amount of manure, which being applied to the portion of the farm on which a rotation of crops was followed, in a short time raised it to a high state of fertility and productiveness.

We leave to others—for the present, at least, the consideration of particular causes which have produced the remarkable effects of plaster in the cases above cited.

LIVE STOCK.—Messrs. L. have had for several years a herd of Improved Short-Horns. They have a less number at this time than they have formerly kept. Some of their animals are of the first quality—especially two cows, *Butter-cup* and *Young Lilac*.—They have fine constitutions, excellent symmetry, and good fattening tendency, with fair indications of dairy qualities. Their dam, *Louisa*, now owned by Mr. PORTER, of Berlin, Ct., was an extraordinary butter cow. She and *Lucilla*, now owned by J. F. SHEAFE, Esq., Dutchess County, were tried in June, 1843, and they made each fourteen pounds eight ounces of butter per week. They were tried again in October following, and averaged nine pounds ten ounces per week.

Messrs. L. are rearing a flock of South Down sheep, —have now about forty head. They are in general well-shaped, and appear healthy and thrifty.

Messrs. L.'s swine are of the Mackay breed. They have had the stock for several years, but have necessarily been restricted to the progeny of but few animals in their selection of breeders, and have been obliged to breed from nearer affinities of blood than would have been desirable. From this, as it is thought, the stock is not as prolific as formerly, and not on the average as good. The breed has been of great advantage to the neighborhood. We saw a number of half and three-fourths bloods, from Messrs. L.'s boar, which were first rate hogs. Messrs. L. now propose to make one cross with a Suffolk boar, and breed back the progeny to the Mackay boar.

Mr. ALONZO LAMB has a farm adjoining that of Messrs. LATHROP, on the south. He has 150 acres here and 150 in out-lands. Most of the land is of superior quality. He has some superior stock. In 1837, he, in connexion with Messrs. LATHROP, bought cattle of Hon. JOHN WELLES, of Boston. They were of mixed blood, but chiefly Durham, crossed more or less with Hereford. Mr. LAMB has two or three fine cows that were bred by Mr. WELLES, and he has several large and well-formed steers. We had but little opportunity to examine his farm.

We shall continue our sketches next month.

* See an account in the Cultivator, p. 30, for 1846, of the effects of plaster on Mr. CHAPIN'S farm, in Springfield.

HIGH CULTIVATION.—In the Hudson river, just below Albany, is Van Rensselaer's island, containing about 160 acres, which for 150 years has been cultivated mostly as a kitchen garden. It is at present occupied by eight tenants, most of whom reside here in summer, but generally remove in the fall or fore part of winter, in order to avoid the freshets which in spring lay the island under water to the depth of from four to ten feet. In consequence of the liability to inundation, no buildings are erected here but those of a cheap and temporary character. It is frequently late in the season before the waters subside sufficiently to admit cultivation, but from the fertility of the soil and its favorable exposure, the growth of vegetation is very rapid, and most articles are obtained here earlier than anywhere else in the vicinity, if grown without artificial heat.

This island rents for ten to eighteen dollars per acre, some parts being considered more valuable than others. Its products are probably worth from twelve to fifteen thousand dollars annually. Some instances of cultivation show a product, which if equalled on the whole island, would give a much greater aggregate.

Mr. C. BATES has occupied eighteen acres for fourteen years, and his products have amounted to $2,500 to $3,000 per year. Some of his crops are very heavy. Cabbages, for instance, are set about 2¼ by 2 feet apart, which permits 8,712 plants per acre. An average price of the article may be considered three cents per head, which, if the ground was fully occupied, would give $261.36 per acre. Mr. B. once sold a half acre of cabbage on the ground, for $145. He has this season about four acres in cabbage. It is difficult to tell what is the average yield per acre of different articles, as many of them are taken up while they are growing, and at first while quite small. Mr. B. however, is confident that beets will average from 800 to 1000 bushels per acre, and carrots, he thinks will average 1,200 bushels. He measured one season, the product of several rods which yielded at the rate of 1,600 bushels per acre. He raises carrots, not only for market, but for feeding his horses. His testimony in regard to their value for this purpose agrees with that of most others who have tried them. A peck to a half bushel per day, for each horse, produces an excellent effect, especially towards the latter part of winter, when it is wished to start the coat of the animal.

BOOK FARMING.—The Ohio Cultivator, speaking of the importation of fine cheese into Northern Ohio, from Hamburgh, in western New-York, says, "During our connexion with the Genesee Farmer, there were more subscribers for that paper in the single town of "HAMBURGH," than there are for the Ohio Cultivator in one or two *whole counties* in the dairy region of the Reserve."

TOMATO.—It appears by a communication of E. Whittlesey, published two years since in the Western Reserve Magazine, that the tomato has been used in some parts of Illinois, and in the neighborhood of Vincennes, for more than fifty years.

PRINCIPLES OF BREEDING.

[IN our December number for last year, p. 374, 375, we published from the *Journal of the Royal Agricultural Society*, a portion of an essay by JOHN WRIGHT, on the points which Short-Horn cattle should possess to render them in the greatest degree valuable. The other portions of the essay, relating chiefly to the breeding of stock, we could not at that time make room for, though they are of a very important character. Believing that the subject is interesting to our readers, at least to those of them who are engaged in stock-growing, we present the following abstract. We have appended, as will be seen, a few notes, to which, in connection with the remarks of Mr. WRIGHT, attention is invited.—EDS.]

.....

It has been attempted to point out a difference between the Durhams, Short-Horns, and Improved Short-Horns: these minute distinctions I will not attempt to define, nor will I stop to inquire how long the counties of Northumberland, Durham, Yorkshire, and Lincolnshire have had a breed of Short-Horned cattle; but certain it is that great pains were taken by Mr. Charles Colling, of Ketton, in the county of Durham, to select animals possessing feeding properties in a high degree, and under his auspices a race of animals was presented to us which may justly be entitled to the appellation of 'Improved Short-Horns;' and it is of this breed of cattle I wish more particularly to speak. They have been called the Durham breed and the Ketton breed: this appears to have arisen from the circumstance that there were two prints published of Mr. Charles Colling's ox that travelled for show, in one of which he is called the Durham ox, and in the other the Ketton ox. It should be remembered that some of the most important selections to improve this breed, were made from herds on the Yorkshire side of the river Tees.

Skeptical persons there are who lay great emphasis on the want of improvement in the Short-Horns of the present day: this may with some degree of truth be admitted, if taken in comparison with the Ketton herd; but surely there is a manifest improvement in the general breed of Short-Horns throughout the kingdom, and a vast increase in numbers. At Mr. C. Colling's sale in 1810, few persons bought both male and female, so as to enable them to continue the same precise blood: consequently the purchaser of one animal only, had to put him or her to such stock as he previously possessed, thereby improving the progeny of his own, but deteriorating that of the purchase; so that the produce was inferior to the original Ketton beast, and might require several judicious crosses to raise them to the original standard. It is a rare occurrence to find a healthy herd of pure and close descent from the Ketton breed. Assuming, then, that the Short-Horns have never equalled the perfection in which they were presented to us by Mr. C. Colling, it behooves us to ascertain the means he used to accomplish so desirable an object, and to apply ourselves assiduously to follow his example. (*a.*)

A brief account of the Ketton herd of Short-Horns may be acceptable to those who never had the opportunity of seeing them. They were of great size and substance, with fine long hind quarters; the space from the hip to the rib was long; but the evils attendant on an extreme length in this part were counteracted by a broad back and high round ribs; the shoulders of the males were upright, and the knuckles or shoulder-points were large and coarse, but that defect was not so apparent in the females; the general contour or side view was stately and imposing, but their great superiority consisted in their extraordinary inclination to fatten. On handling, the skin was very loose and pliant, and the feel under it was remarkably mellow and kind. Mr. C. Colling was distinguished above all other breeders of his day by a peculiarly fine discriminating touch, which enabled him to judge of the quality of the flesh and the tendency to fatten, to which, in connection with good judgment in other respects, his superiority and success as a breeder were mainly attributable. The color of the Ketton Short-Horn varied greatly—red, red and white, roan, and also white being found in the same kindred.

In breeding Short-Horns, many persons whose opinions are entitled to great deference, tell us that we should breed from such only as in themselves are perfect: this, however plausible in theory, will be found untenable in practice; for it may be asked, where do you find the first parents? A perfect and uniform-shaped beast, that lays its fat on every point in equal proportions, is highly desirable, so as to have no excess in one point to the disproportion of another; and in our endeavors to accomplish this desirable object we should first become acquainted with the defective points in the female, and then select a male possessing those points in great perfection, and thereby insure an improvement in their progeny: upon this principle hangs all the necessary knowledge for improving the shape of animals; but in all our selections we must never lose sight of *inclination to fatten*—the prominent feature of the Short-Horns.

IN-AND-IN BREEDING.—From the vast superiority of the Ketton Short-Horns, and the desire to perpetuate them with pure pedigrees, persons have been induced to breed from animals of close affinity of blood; being conscious they could not resort to other families without employing inferior animals, and thereby impairing the properties of their own herd. Various degrees of success have attended this course. There are several instances of superior animals bred in the closest affinity, whilst in the great majority of cases the failure has been extensive and lamentable. * * * The writer's opposition to this principle of breeding in-and-in, proceeds from having witnessed so many serious losses in herds so allied, which, previous to the affinity of blood, were healthy and strong constitutioned. In the early Short-Horns no hoosing or cough, no delicacy of constitution was known; but as affinity of breeding progressed, a delicacy of constitution accompanied it. It has often been exultingly said that Comet was the finest bull of his day, and at the same time had the greatest affinity of blood of any animal we had: this is a truth which cannot be denied, but it might be an exception, and not the rule. It was notorious that the stock got by him out of cows that were strangers in blood, was far superior to such as were more nearly akin. It will be remembered that Comet had a deformed shoulder: who can say that this did not proceed from close affinity in the parents? In the human frame, it is a very common thing to see deformed shoulders proceed from disordered lungs.

In the Short-Horns of close affinity of blood, how many bulls do we find with lame shoulders, how many called cripples, and how many cripples in reality that never met the public eye? We see no other race of animals with this defect, except those Short-Horns bred in-and-in. It has been said that this disease might

arise through breeding from animals of bad constitution, and thus perpetuate the disease in their offspring; but when we find this disease originated and prevailing in the same family after repeated crossing in-and-in, though unknown in their ancestors, it is a fair presumption that this practice is inimical to the constitution. * * * Mr. Mason, of Chilton, commenced breeding Short-Horns from the same parents as Mr. C. Colling, and for a certain period pursued it very successfully; but being deprived of the privilege of sending his cows to the Ketton bulls, he was constrained to use those of his own breeding, and the losses he sustained in his young stock were so great that at one time his show cows were reduced to four; but by using the bull Jupiter, whose affinity of blood was supposed to be remote, he again became a successful breeder. Many other herds might be quoted in support of this opinion.

Among the breeders of poultry, there are few who do not know that when the young ones become tender and difficult to rear, the remedy is found in procuring a change of the male bird. Mr. William Clark, of Shincliff, whose fighting cocks were so notorious, continued to breed from his own kind till they lost their disposition to fight, and stood to be cut up without making any resistance, and were so reduced in size as to be under those weights required for the best prizes; but on obtaining a cross from Mr. Leighton, they again resumed their former courage and weights. In the numerous trials afforded him, he found those that were bred from a hen and her male chicken, were the heaviest cocks and the best fighters; those from a cock and hen of the same brood the reverse. (*b*)

In pigs, the writer's experience was considerable in breeding from three or four sows at the same time, all descended from the same parents, boar and sow: those were put to the same boar for seven descents or generations; the result was that in many instances they failed to breed; in others they bred few that lived; many of them were idiots—had not sense to suck; and when attempting to walk they could not go straight. The best two sows of this breed were sent to other boars, and produced several litters of healthy pigs. In justice to the advocates of the in-and-in principle, it is but right to state, that the *best* sow during the seven generations was one of the last descent—she was the only pig of that litter. She would not breed to her sire, but bred to a stranger in blood at the first trial. She possessed great substance and constitution, and was a very superior animal. Superior animals bred in that way may be occasionally met with, but this falls far short of proving the system to be good. (*c*.)

.....

NOTES.—*a*. It is well to notice that Mr. WRIGHT declares it was under the auspices of Mr. CHARLES COLLING that the Short-Horns obtained so high a degree of perfection as to be "justly entitled to the appellation of *improved* Short-Horns." This appears to be the view generally taken in regard to the subject in England, though we believe it has been asserted in one or two instances, that Mr. COLLING "*bought* better Short-Horns than he ever bred," and that the breed, or certain families of it, had, more than *two hundred years ago*, reached a degree of excellence which has not since been exceeded!

b. It is necessary to observe particularly what Mr. WRIGHT considers in-and-in breeding. It is evident that he does not intend to argue against breeding from animals which have some affinity of blood; for in the case of the fighting cocks which he cites, the best fighters and the largest fowls are said to have been produced by breeding a hen to one of her own male offspring. This would, at all events, produce a stock having three-quarters the blood of the mother. But those bred from a cock and hen of the same brood, were the worst stock. These were of precisely the same blood, and of course were bred strictly in-and-in.

He mentions that Mr. MASON'S stock degenerated on account of his using only bulls of his own herd. But we think the mere statement of this circumstance is hardly sufficient to account for the degeneracy. Mr. Colling, it has been stated, used no bulls for several generations but those of his own breeding; yet his cattle, with a few exceptions, rather improved than degenerated. JOHN ROOKE, in a letter dated June 2d, 1821, published in the *London Farmer's Journal*, speaks of the celebrated bulls Foljambe, Lord Bolingbroke, Favorite, and Comet, and adds—"What places Mr. Colling in a high point of view, is the fact that he was the breeder of the whole line of these eminent bulls from Hubback, *without being indebted to any other person for a sire*." Both of these celebrated breeders used bulls of their own breeding, and the different results are probably to be explained by the fact that Mr. COLLING'S stock was originally more varied in blood, and that from the larger size of his herd he had a wider range for selection. But it is not improbable that even Mr. COLLING may have carried the system of breeding from affinities too far—especially in the case of Comet, referred to by Mr. WRIGHT.

Breeding from animals of various degrees of relationship is often practiced by the best breeders, and is in many cases necessary in order to fix or continue certain important peculiarities; but care is required that both parents have not a tendency to the same defect—a caution which should be more particularly observed, when it is known that members of the same family have generally similar constitutional habits and tendencies. In an essay "On the Breeding, Feeding, and General Management of Sheep," by T. E. PAWLETT, published in the sixth volume of the *Journal of the Royal Agricultural Society*, this subject is considerably discussed. Mr. PAWLETT observes that his experience in breeding had extended through more than twenty years, and that he had bestowed close attention to the subject. He has been a very successful competitor for the prizes of the Royal Society, the Smithfield Club, &c.* He is in favor of breeding from affinities, though he says—"I do not, however, recommend that animals *closely* allied by blood should be put together generally; yet I have known very good sheep, for instance, produced by putting the son of a ram called A to the daughter of A, [that is a male and female by the same sire, but different dams.] in cases where their points would suit each other, and I should never hesitate in doing so. I cannot see the utility of crossing for the sake of crossing or changing, unless I can perceive superior qualities in another person's flock which mine does not possess; even in that case, if my neighbor's flock were not quite so well bred as my own, I should long hesitate before I had anything to do with it, as the more I see of breeding the more I am convinced of the advantages to be derived from using well-bred, indeed the best bred animals."

c. The fact is well established, that there are in families peculiar constitutional excellencies as well as defects. These are transmitted hereditarily, and the object of the breeder is to perpetuate and increase the good qualities and avoid the bad ones. This is the great point to be observed, and in reference to it the constant exercise of skill and judgment is necessary. Some degree of affinity, as before remarked, is often required to secure the points and qualities which are desired, but if the course is carried too far, it may defeat the object by unduly developing defects. Mr. WRIGHT observes that breeding in-and-in may occa-

* On looking over the list of awards, we find that Mr. PAWLETT has received from the Royal Agricultural Society, within the last seven years, eleven prizes on Leicester sheep, varying from five to twenty sovereigns each.

sionally produce a superior animal, but that this does not prove the goodness of the system. It has been remarked by others that though most animals bred in-and-in are of little value, this is, notwithstanding, the course to produce *prodigies*. A good judge of stock and successful breeder, once observed to the writer, that in-and-in breeding was sure to produce an uncommonly good or an uncommonly bad animal—the tendency would be to extremes. And it has been said in relation to the stock of a noted breeder in England, who has long practiced breeding from close affinities, that though some of his animals have possessed extraordinary excellence, a large majority of them have been precisely the reverse.

The London *Farmer's Journal* of Nov. 21, 1823, publishes an article signed "JOHN HALL, of Little Marshall, near Exeter, a Breeder of Sockburn Short-Horns." He attributed the impotency of Short-Horn bulls, (of which much complaint had been made in former numbers of the publication mentioned,) to "an unfortunate, obstinate perseverance in the in-and-in system of breeding," which he believed had been carried to a "most fatal extent in what were called 'Improved Short-Horns.'" He adds, also, that "the weakness of constitution, and consequent great mortality of calves, may assuredly be attributed to this cause.

Mr. YOUATT, in his work on British Cattle, (p. 377,) speaking of "catarrh or hoose," observes—"Where the system of breeding in-and-in has been carried to too great an extent, and been pursued in defiance of many a warning, hoose, perpetually occurring, difficult to remove, and degenerating into confirmed phthisis, will painfully, but somewhat too late, convince the farmer of his mistake."

REPORTS OF COMMITTEES OF AGRICULTURAL SOCIETIES.

WE have often had it in mind to say something on the subject of reports of committees appointed to adjudge premiums at cattle shows and agricultural exhibitions. These reports are often of such a character that they afford but little satisfaction or benefit to the public. They sometimes merely state the awards in the briefest manner possible—giving only a list of the premiums and the successful competitors. The consequence is that people in general are wholly at a loss as to the reason why one article or animal has been preferred to another.

It is, or should be the design of agricultural societies to encourage excellence in the various objects for which they offer premiums; and in order that this design may be best promoted, every person should have a distinct idea of what is held to constitute excellence—that is, the qualities which the society or its acting agents would most approve, should be clearly known and understood. The people should be told plainly on what the judges form their preferences. As matters are frequently managed, the public are ignorant on this point. Different persons compete for a premium: each believes that the particular qualities of his animal or article entitle it to the preference over the others: the judges award the prize, but the reasons for their preference are never known by either the successful or unsuccessful competitors, or the public in general. Hence the judges are charged with favoritism by some, and by others the competition is looked upon as a lottery where all depends on chance.

Now all this difficulty could be obviated if the committees, in connection with the statement of their awards, would also furnish the grounds of their decisions. Should they, for instance, be called on to award premiums on cows, let them state the points and qualities which they have regarded, and show wherein the animal that has received the highest prize has been deemed superior to the others. This course would in a great degree silence murmuring, and inspire confidence, at least in the honesty of decisions.

In relation to this subject, we find some good suggestions in a late communication to the Burlington (Vt.) *Free Press*, from which we take the following extract:

"The mere award of premiums, contains nothing of interest beyond that of a personal nature. There is no element of *general* interest in a report comprising nothing more. In order that a report may be of general interest, it must contain some information of a general nature, on the subject, to which the attention of the committee is called. There must be a statement of the principles by which the committee have been guided in making the awards. Take an example. Should the Committee on Farm Implements commence their report by stating briefly and accurately, what constitutes a good plow; how the form of the plow should be varied for different kinds of plowing; what soils require furrows of peculiar inclination and depth, and what plows are best fitted for different soils, there would be something in the report of real and universal interest and value. Then the awards should follow, and the why and the wherefore of each award would be manifest to every one. Such a report would show that the members of the committee had a correct or faulty understanding of their business for the time being; and would tend more to provoke that kind of discussion among the farmers, which results in progress, than anything or all things else emanating from the society."

One cause of the brevity of reports, is the hurry and confusion which inevitably attends the meetings at which they are made. Their delivery is generally the last business which is attended to by the societies previous to adjournment; and the people, wearied and excited with the various incidents of the occasion, are desirous of hearing the "conclusion of the whole matter" in the fewest words and least time, that they may the sooner be on their way home. Under these circumstances, the reading of elaborate reports, however valuable or well written, would hardly be listened to with the attention necessary to their being appreciated.

In relation, also, to the publication of the awards of committees, it is proper to state that the papers through which they are given, are often so limited for room that they cannot give more than a summary of the premiums. This is the case in regard to the awards made at the shows of the New-York State Society. The list is a long one, even when it is abridged to the greatest practicable degree; and as there is always great anxiety to learn, at the earliest moment, how the premiums have been decided, it becomes almost necessary to publish the whole at one time. This of course precludes the possibility of giving the reports of committees in detail; but most societies publish their transactions in separate pamphlets or volumes, and these afford the appropriate mediums for giving to the public every thing connected with the societies, or having a bearing on subjects which come within the sphere of their operation.

FALSE THEORIES IN RELATION TO BEES.

A KNOWLEDGE of facts constitutes science. Correct observation alone, can lead to a knowledge of any science; from such knowledge only, will correct practice result.

The honey bee has been a prolific theme for guessing, among ancients as well as moderns. Numerous contradictory theories are advanced, extremely perplexing to the inexperienced apiarian, some of which must be refuted or reconciled by attentive observation, before uniform success can be expected. To refute some of these incorrect theories by a relation of facts, is the object of this communication.

That my observations may not appear too limited, I will say that I have had the care of bees for more than twenty years; and since 1840, of over one hundred hives. Some six or eight years since, I inquired through your paper, for the cause or remedy for young bees dying in the comb, which was replied to by several, assigning *cold* for the cause. I then gave some reasons for doubting that theory, which I think still hold good, and seem to be confirmed by further observation. But as that cause is still urged, I will state my objections.

Mr. Howard, in the January number gives his reasons very forcibly, that there is no disease in the young bees to prevent their hatching. In my experience, whenever I have discovered any dead larvæ, however few, they have never failed to increase and ruin the hive. When I first had diseased bees, I pruned out all the brood comb, leaving such only as contained honey. The bees made new and filled it with brood, which invariably became diseased. This suggested the idea of its being a contagious disease, and that the *honey* in such hive contained the poison. I have accordingly taken such honey and fed it to healthy young swarms, while raising young brood, as many as a dozen times, and never knew an instance where they escaped the contagion.

Mr. H. further says, that according to his observation, a *full colony* will secure themselves from cold, and of course, then, from the dead larvæ. Three years ago in March, I had a good swarm leave the hive and go in with another good one, and as there was a plenty of honey, I expected an early swarm, but got none at all. They gradually diminished till the last of June, when not more than half a swarm remained, and upon examination, I found the comb filled with larvæ, nine-tenths of which were dead. In 1840, I had two large swarms come out together, which were put into a barrel, and in the fall they were diseased. Several young swarms shared the same fate. The strongest are just as likely to become diseased, as the weakest colonies.

Mr. H. also says that the spring of '46 was the first in which his stock have suffered before swarming. I have not escaped a year in fifteen without having several, and last year no worse than others. When swarming time arrives, and I have any that have not increased as usual, on examination, I generally find diseased bees, and as my only remedy, drive them out, satisfied that they will grow worse after catching the distemper. So well assured am I of this fact, that I make two general examinations. About three weeks after the first swarm has left a hive, the young that are alive are generally hatched. If I find any of the breeding cells closed, (which is always the case with dead larvæ,) I open them with the point of a knife, and if dead give the bees a new habitation at once. Again, in the fall, every hive is looked to, and a half dozen diseased larvæ condemns it at once, for a stock hive. I will give any person twenty-five dollars who will give me an unfailing preventive or remedy for this disease; and I can well afford to do so, as I lose yearly by it twice that sum.

I have objections to some theories offered by Mr. Weeks, but before I state them, I must say that I am greatly indebted to him for information through the Cultivator, on the subject of bees. I would not exchange what I have learned for all the paper has ever cost me. But error, from any source, ought to be corrected. First, then, he says—"two causes, and two only can be assigned why bees ever swarm; the first, the crowded state of the hive; the second, to avoid the battle of the queens." I object to the first, because it is insufficient in all cases to make them swarm, and swarms do actually come out independent of either of these causes. I do not say bees being crowded will not sometimes bring out swarms, but some other cause must exist in such instances as the following. I have known all the bees to swarm from a hive, when a pint measure would contain the whole of them. Ten years ago, I had bees in a large box; before it was a quarter full, a regular swarm left. Last spring, to give the principle a fair test, I placed under five full hives of ordinary size, others of equal dimensions, without a top, so that the bees could continue their combs to the bottom if they choose, but not one has done so; each has swarmed without filling the lower hive an eighth part full. Want of room could not be the cause here, nor could they have swarmed to avoid the battle of the queens, for I have good reason to believe that the old queen led each swarm.

I have known bees so crowded that a great portion of them were obliged to remain out all summer, and yet they did not swarm at all. I have known swarms come out and return two or three times, and then continue in the old hive all summer, notwithstanding the young bees continued to hatch and increase the crowd in the hive. The fact is, no single theory will account for all swarms. I have noticed, however, that all regular swarms must be in a season when there is plenty of honey, and this is generally between the middle of May and the middle of July. We often have swarms in this section in August, between the 15th and twenty-fifth, when the bees are at work on buckwheat. At such times all good swarms will raise a brood of drones, whether the queen be young or old. Although this contradicts the theory that the queen must be at least eleven months old before they lay eggs for the drones, it is certain they will raise them at any time when they get plenty of honey, and as it gets scarce they will destroy them—consequently the last of July is a time of massacre. In the summer of '42, they killed them the fore part of June, and we got no swarms, but the hives were crowded with bees. I never had a swarm when they were destroying the drones.

Mr. Weeks says—"when the first swarm leaves the hive, no queen, in any stage of existence, is left." But I have examined hives the same day that the first swarms left, and found cells finished containing queens. This has been the case in four hives out of five. I have driven out a swarm after several days of bad weather, and found queens' cells finished. Four hours of sunshine in the middle of the day, would probably

have brought out the swarm. While examining a glass hive, during the past summer, I saw the bees constructing a royal cell. I watched it for more than a week. When finished I predicted a swarm, (although none were crowded outside for want of room.) The very day I expected them, they came out. In eleven days after, a second swarm came out. Previous to the last leaving, I had the satisfaction of seeing a young queen several times while making the piping noise, such as we can always hear just before the coming out of all swarms excepting the first of the season. She appeared very uneasy, running about in all directions, only stopping to vibrate her wings against her body, which was done simultaneously with the sound. This proves that queens sometimes make the noise when they are not in the cells. The other bees made no attack upon her, as some writers have stated they will do in such cases.

The supposition that all hives are left destitute of a queen when the first swarm leaves, has led to error in practice. Mr. Colton, of course, thinks, that young queens are unnecessary to produce swarms, as it is said his hive can be made to swarm within two days, at any time. Mr. Jones' dividing hive is on the same principle. I had supposed it was an established fact, that if a swarm was driven out with the old queen, leaving plenty of bees and young brood in the comb, queens might be raised as well as if they had swarmed, but I was mistaken. I tried three at first—not one swarmed. The only way in which I have ever succeeded in making them raise a queen from workers' eggs or larvæ, is to give them but a small piece, and then twelve days is as soon as they can perfect one. When I have occasion to take out a swarm and leave bees in the old hive, I find I must be very cautious, especially if it is not in swarming season. If I can see no preparation for a queen, I generally supply them with one in the cell. If any one doubts there being any young queens commenced, at the time the old one leaves, they can be satisfied that they are so, (at least sometimes,) by the following mode of examination. The evening after a swarm has left, or the next morning, blow some tobacco smoke into the hive to stupefy the bees; turn the hive bottom upwards, puff some smoke between the combs; the bees will retreat and give an opportunity to examine the combs; to the distance of six or eight inches into the hive. In many hives there will be some sheets of comb that do not extend across the whole way, making an edge somewhere near the middle. On this edge is generally placed the royal cells. Sometimes they are on the outside, next the hive, and often on the bottom. Look through the hive, giving the bees a puff of smoke occasionally, to keep them quiet. It is very seldom the queen cells are so near the top as not to be seen. I counted nine the past summer, in one hive, within two inches of the bottom. Some were sealed over, others not more than half done. This was the next morning after a swarm had left.

Another point in dispute, is whether the queen ever leaves the hive, excepting when leading a swarm. I have seen them do so often, in all instances between one and three o'clock, P. M., at which time more drones are out than at any other. She always came from a hive that a first swarm had left some fifteen or 20 days previous; consequently they were young queens.

Mrs. Griffith, of New-Jersey, I think, has watched for this, and felt confident that no such occurrence ever took place, and she has added as an objection, that as the prosperity of the hive depended on one bee, and that one should leave for an excursion in the air, it would be liable to be devoured by birds, driven off by winds, or destroyed by other casualties, by which the hive would be lost. Now, just such cases do actually occur. The queen at this period, from some cause, is occasionally lost—one in twenty on an average, and with me this year, one in ten. The apiarian who cannot ascertain this loss, does not understand his whole business, and as there are many who do not, I will say that if they would take the trouble to look at their hives for a minute in the morning, before the bees commence work, about fifteen or twenty days after swarming, they could, by the commotion of the bees, ascertain the loss of the queen. They will see the bees running about in all directions, while in other hives they are quiet. In the middle of the day it is not so easily perceived. After two or three mornings they seem to become reconciled to their fate, and continue their labors as others do. I noticed this in one of my hives before I had half a dozen, and occasionally ever since. The result generally has been, that before cold weather, or very soon after, the bees would all be gone, and yet the hives nearly as heavy as others.

Now, when I have a case of this kind, and I have had a swarm within a week, I proceed to look for queen's cells, and with a broad knife I cut out one or more, (as they generally have several I have no fears of leaving them destitute,) and introduce it in a vertical position into the hive that has sustained the loss. In a short time all will be quiet. I have often put it in through a hole in the top of the hive, taking care that the lower end shall touch nothing. If more than a week has passed after a swarm has left a hive, it is unnecessary to look in that for a spare queen, for they are generally all destroyed by that time, unless they intend to swarm again, which can be ascertained about the 8th day, by listening close to the hive for the piping noise.

Second and third swarms often have several queens—I once had six in one swarm. When necessary, I take one of these and put it in the hive—even if there is but one, I take it and let the swarm go back; which is often an advantage, besides giving the old hives a queen. But if no queen can be had in any way, a piece of brood comb containing eggs or larvæ of workers must be introduced, but this is more uncertain to produce a queen. If all these circumstances were duly attended to, we should have less complaint of hives being found destitute of bees and full of honey—or as is often the case, full of worms. Such instances often occur with negligent bee-keepers, when they supposed the bees were doing well.

One of your correspondents supposes that bee-bread is changed to honey. I wish he had stated the time necessary to effect the change. I have had it two years old, or more, and it was still bee-bread. I have "lots" of it every year when I am making wax. I have put it on my garden, but can see no great effect from it as manure, and should like to turn it to some better account. There is no doubt that the bees collect the pollen or bread for food for their young. One circumstance in particular confirms me in this belief. When a hive loses its queen, and is not supplied with one, there is of course no brood, but if there is plenty of bees, nearly every cell will be two-thirds full of bread, and finished out with honey and sealed over. The comb looks very well outside, but it is disagreeable to eat in this condition, and it is impossible to separate all the honey from it, and I have never been able to get out all the wax.

I have had two or three young swarms lose their queen a few days after being hived, and they filled the hive nearly full of what appeared to be very nice honey; but a person taking it for such would be greatly mistaken—it is as much bitter as sweet.

Other theories have been advanced which are contrary to my experience, but the objections would lead to little practical utility, and I shall say nothing of them here. I did intend to have said something on economy in the construction of bee-hives, but have not room. *Coxsackie, N. Y.*, 1847. M. QUINBY.

RUNNING OUT OF VARIETIES—CHANGE OF SEED.

We have often spoken in reference to this subject. Still there is no doubt many entertain the idea that varieties of grain, vegetables, and fruits, have their periods of existence. Another idea, akin to this is, that it is necessary to "change seed"—that a kind of corn, potatoes, or other vegetables, naturally tends to degenerate, when its cultivation is continued on the same farm; and that to insure the best crops, seed must occasionally be procured from a distance. We believe that the reverse of this is true—that the tendency is to naturalize on every spot of earth those species and varieties best adapted to the situation and circumstances. Man, it is true, may counteract this effort of nature by modes of propagation adverse to the principle. The natural course would be to encourage and continue those plants which had best adapted themselves to the location, and which would from generation to generation produce the most perfect seed and the most vigorous stock. Man, instead of this, sows the seed perhaps, of those plants which are least perfect, and which, in consequence, produce a degenerate stock, declining still more with each generation.

It should be the aim of every farmer to procure in the first instance, those kinds of grain or vegetables, which, from their known character, would be most likely to succeed on his land; and then to select seed from those particular plants or stocks which are found in the greatest perfection. Let this course be strictly and constantly followed, and no change made, (unless as a mere experiment on a small scale,) till it is *certain* that a *better* kind can be substituted.

We lately met with some striking facts in reference to this subject, in an article written by Joseph Cooper, of Cooper's Point, New Jersey, and published in the *Memoirs of the Pennsylvania Agricultural Society*. The article was written in 1799, and shortly after its appearance in this country, it was re-published in Europe, where it received much attention. Mr. Cooper was led by his own experience and observation, continued through more than forty years, to repudiate the idea—"that changing seeds, roots, and plants, to distant places, or different soils or climates, is beneficial to agriculture." He says—

"In or about the year 1746, my father procured the seeds of the long early squash, which have been kept on the farm ever since without changing, and are now *far preferable* to what they were at first. Our early peas were procured from London the spring before Braddock's defeat, (1756,) and have been planted successively every season since, on the same place. They have not been changed, and are now preferable to what they were when first obtained. The seed of our asparagus was procured from New-York in 1752, and since that time I have not planted a seed exeept what grew on my beds; and by selecting the seed from the largest stalks, I have improved it greatly. A complaint is very general that potatoes of every kind degenerate, at which I am not surprised, when the most proper means to produce that effect are constantly practiced, to wit: using or selling the best, and planting the refuse; by which means almost the whole of those planted are most degenerated. This consideration induced me to try an opposite method. Having often observed that some plants or vines produced potatoes larger, better shaped, and in greater abundance than others, without any apparent reason except the operation of nature, it induced me to save a quantity from such only for planting the ensuing season; and I was highly gratified in finding their production exceed that of others of the same kind planted at the same time, and with every equal advantage. By continuing the practice, I am satisfied I have been fully compensated for all the additional trouble."

Mr. Cooper also states that about the year 1772, he received a few grains of a small kind of Indian corn, said to have come originally from Guinea, and to have the habit of bearing eight to ten ears on a stalk. The corn was planted, and the ears were of a very small size, small kernel, and but little ripened before frost. He saved some of the largest and earliest, and the next season planted them between rows of a larger and earlier kind. He saved seeds from stalks that produced the greatest number of the largest ears, and were the *first to ripen*, which he planted the ensuing season, and he found the product superior in quantity and quality to any he had ever before raised. He continued to plant that kind of corn, always being careful to select the seed, and it proved so valuable that he never changed it. He gathered the seed in the field, selecting the earliest and best ears—or rather, selecting from stalks containing the greatest number of good ears.

He mentions also a striking example in regard to melons. He received from Georgia some seeds of a kind of water-melon represented to be of superior quality. He says—"knowing that seed from vegetables which had grown in more southern climates required a longer summer than that produced here, I gave them the most favorable situation, and used glasses to bring them forward, yet very few ripened to perfection; but finding them to be as excellent in quality as described, I saved seed from those first ripe, and by continuing that practice four or five years, they became as early melons as I ever had."

A similar instance in regard to the naturalization of melons came within the knowledge of the writer. Several years since, a gentleman near Zanesville, Ohio, brought from the southern part of Virginia some seeds of a choice variety of water-melon. The kind had been cultivated in the neighborhood from which the seeds were taken with great care, and kept entirely free from any intermixture for fifty years. The new location afforded a season hardly long enough for their full maturity, but by taking care to select the earliest, the variety became in a few years adapted to the climate, and our friend became noted for the finest water-melons ever known in the region.

Bite of a Mad-Dog.—To prevent all danger of this terrible disease, cauterize the wound thoroughly with lunar caustic, introducing it most effectually to every part of the wound, and enlarging the wound if necessary. An eschar is soon formed, which sloughs away, carrying off the poison, which never immediately penetrates the system. A second application ensures more complete safety. The celebrated author of Youatt on the Dog, was many times bitten in his life, but always cured himself in this way.

Good Black Ink.—½ lb. of nut-galls; 3 oz. of gum arabic; 3 oz. of copperas. Soak the nut-galls in 3 pints of rain-water; the gum arabic in half a pint of warm rain-water; the copperas in another half pint; let them stand separately 48 hours, and then mix them, and the ink is made. This is the recipe of Prof. Webster, of Harvard University.

AGRICULTURE AND RURAL ECONOMY OF EUROPE.

NOTES OF A TRAVELLER IN ENGLAND AND WALES.

.....

WALES.—The appearance of Wales is far different from that of England. On approaching it from sea, its lofty mountains, Snowden and Penmaen-Maur, and other bold cliffs, are very picturesque, but give little indication of the delightful associations which the traveller witnesses in passing through the country. The mountains, half clad in rolling vapors, assume a picturesque grandeur, and few countries can produce more glorious mountain scenery than is exhibited in Wales. The mountains are generally half concealed in mists, upon which, as the sunbeams fall, they assame hues of the most brilliant nature, which contrast finely with the lofty mountains, round which they play in never ending variety.

The most convenient access to North Wales, is from Liverpool, by steam-packets, which ply daily, to Menai Bridge. The passage down the river Mersey, gives a fine view of the spacious docks, and extensive piers and quays of Liverpool, covered with the multitude of people from every clime. On the opposite side of the river is the new and flourishing town of Birkenhead, with its newly erected spacious docks, which are destined to become formidable rivals to Liverpool. The scenery here is very fine, and the appearance of this newly erected and flourishing town is much more like our American towns than most of those we saw in England. As the steamer glides past the Cheshire coast, you pass Rockfort, which commands the entrance into Liverpool. This is a very finely constructed circular fort, mounting about 25 pieces of cannon, all mounted so as to be used with great effect upon vessels approaching the mouth of the river. Near the fort is a light-house called the Rock-light, which has a revolving light, with 3 different lights—deep red, bright red, and white, exhibited in about 2½ minutes. The Cheshire and Welsh coast, along which the steamer proceeds, is studded with villages and signal stations, and on the highest elevations are discovered the telegraphic stations from Liverpool to Holyhead, about 80 miles—stations 8 to 10 miles distant—worked by arms—and intelligence communicated in about 10 minutes. Intelligence of vessels arriving—state of the weather, &c. Steam tugs are sent down from Liverpool to bring up the packets as they are telegraphed.

The floating light, which is a vessel firmly moored in the channel, contains a beacon light, hoisted at its mast head at night, to guide vessels from the shoals, with which the mouth of the Mersey abounds, is in sight. We pass the great Ouns Head, which is the most striking object; it juts out from the main land, and looks like a large mountain in the sea. It is connected, however, with the main land by a low valley. The head can be seen a distance of 30 miles, and as you approach it, it becomes terrific—and especially to the mariner in a storm from the northwest—and many a brave and hardy crew have found their graves at its base. Near the top of Ouns Head, and in the midst of a pasture where the small Welsh sheep, so famous for their superior mutton, are observed, (not larger to appearance from the steamer, than small lambs,) is discovered a church, surrounded with a small enclosure. No habitation is perceptible in its vicinity; yet I was told there were hundreds of people from the opposite side of the head attended worship here on the sabbath. Here is one of the finest prospects that can be imagined.

The river and valley of Conway is next seen. Conway is a perfect walled town, though very small. Its situation, on the rising ground from the river, is very fine; though after passing the walls into the town its beauty vanishes, as it is very inferior. It has one of the most magnificent ruinated castles in the kingdom. It was erected by King Edward the 1st, in 1284—was calculated to hold 2000 men—and is now a most attractive ruin,—still in considerable preservation. The court-yard, and most of the rooms are entire; a portion only of one side of the wall being gone. The appearance of the castle from a distance is very fine. There is a suspension bridge here, built about 20 years ago, and the new railroad from Chester to Holyhead, passes by the tower, under the walls of the town. Soon after passing the mouth of the Conway, the steamer brings you alongside Penmæn-Maur, the termination of the Carnarvonshire mountains, 1550 feet above the level of the sea, and on its side is seen the great mail road between Conway and Bangor. Soon after passing through Beaumaris Bay, the town of Beaumaris, the county town of Anglesea, with its fine castle, appears, with Bangor on the opposite side of the bay; and here is first seen the Grand Menai suspension bridge, which is the admiration and wonder of the thousands who have viewed it. The plan of the present bridge, on the suspension principle, was adopted in 1818. It consists of an opening of 500 feet between the points of suspension, and there are in addition 7 arches—four on the Anglesea coast, and three on the other of sixty feet span each; making the whole bridge 910 feet long. There are two road ways, with a foot path in the centre. It was commenced in 1820, and completed in 1826. The suspension chains consist of four strong iron cables—perpendicular iron rods, five feet apart, supporters of the road-way. The largest vessels pass under the bridge without difficulty. The fastenings of these ponderous chains in the rocks are shown, and are worth examination. The bridge is so firm that carriages pass over it at full speed, without any perceptible effect.

The expense of this bridge was not far from 60,000 pounds sterling. It is a most splendid structure, evincing the triumph of the mechanic arts. Previous to its erection, the intercourse between Anglesea and Carnarvonshire was by boats, and the cattle from Anglesea passed over by swimming across the strait. Frequently they were carried far down into the bay, but few if any were lost.

From the bridge you view a fine monument erected to the Marquis of Anglesea on his estate, to commemorate his services at the battle of Waterloo, where he lost a leg. He still lives, and is extremely popular with his Welsh connection, though I believe he cannot speak a word of the language. His country residence here, and his estate, give evidence of his care and attention to its proper management, both for the benefit of himself and his tenants. He is everywhere spoken of in terms of the highest respect and enthusiasm. I have no doubt from what I heard of him, both in Wales and in London, that he is justly entitled to the good opinion expressed of him, and that if his example was more frequently followed, much of the misery which prevails among the farming population would be avoided.

The appearance of Anglesea, as well as Carnarvonshire, is very different from England. The numerous mountains and lesser elevations afford far less tillable

land than is to be found in most parts of England. In many parts there is a want of that neatness and care which so generally prevails in England. Still most of the land is under a very fair state of cultivation, and many of the tenant farmers are wealthy, and have as many comforts and conveniences as can be found in any part of the kingdom. H.

RURAL NOTICES ABROAD—By Ik. Marvel.

.....

Wines of France, (Continued.)—*Champagne.*—The town of Epernay is near the centre of that district which furnishes the Champagne wines. The soil rests generally upon lime stone, and is in many parts but a loose marl.

The high road from Paris to Metz, (east by north from the capital,) passes through many of the esteemed vineyards. Toward Rheims, is the high country where is made most of the red wine, (vins de la montagne.)

The system of cultivation is the same that obtains in other vineyards. The grape from which is made the best known sorts, along the Marne, is small and exceedingly sweet, and very much affected in product by the season. The vintage is later by a fortnight or more than in other vineyards. The bottling takes place in the spring following the vintage; and the sweet taste possessed by most champagnes is given by the addition of sugar dissolved in wine. If this *liqueur* or syrup be formed of red wine, it gives the pink tinge belonging to so called pink champagne. The taste of the wines is very much altered, and not unfrequently much improved, by judicious mixtures. More or less of *liqueur* is added, as the vintage may be intended for home or foreign consumption—for the Russian or English market.

Every season has its own reputation as producer of good or bad wine. Hence the favorite date of 1842, known over Europe as a superior year. And it is probable that the wine of 1842 will last for a century to come. Nor is there a system of counterfeiting in date only, but also in name. A tenth part of all the champagne made is lost annually by breakage. It is needless to say that the loss is more than made up by sweetening and carbonating the cheaper white wines of France, and the stocks of the Rhine.

A company of large capital exists in Paris for making Champagne from the poorest Chablis. It is sweetened, charged with gas, bottled, labelled, and ready for market in an hour after leaving its quiescent state of *vin ordinaire.* The drink, however, is palatable—vinous—effervescing—bears a good price—is slightly intoxicating—does not cloy the appetite, and so answers all the ends of all those tavern keepers and tavern loungers who are both honest and ignorant.

Nor is this all of counterfeiting. Champagne, or what passes for Champagne, is also made from apples, and gooseberries, and beets, and I know not what beside; so that the chances of procuring in one of our western inns, a bottle which has actually lain in the chalk cellars of Epernay, and been tilted day after day by the wine watchers of Madame Cliquet, and disgorged of sediment, and refilled, and flavored, and new corked, and escaped the season of bursting, and the English merchant, and the French trader, and the Russian prince, and the German landlord—are almost infinitesimal.

Some idea may be formed of the extent of the vineyards, from the fact that a single proprietor expends $25,000 a year for corks alone. The annual average product of all the vineyards in the Champagne district, is fifty millions of bottles. Of this number, nearly half goes every year to Russia; England has of course a lion's share; Germany boasts of nearly as much; there is plenty to be found in Italy—as much more at Madrid; the French drink of course occasionally, and America and the Indies are noway behind the others in claim.

Vineyards of the Rhine.—There are very pretty stories told by many of the tourists, of the vineyards along the Rhine;—of baskets filled with earth, lodged in crevices of the rocky banks—which baskets of earth nourish vines that trail their purple clusters all down the cliffs. Such stories are to be taken with some exceptions. There are, indeed, here and there upon the west bank, little shelves of rock, where earth is scanty, and where more has been deposited, and retained in its place by pikes of wood, interlaced sometimes with osier, and there grows on them a short stumpy vine, close trimmed, and bearing not many clusters, or large, but fruit yielding superior wine. Nor is it because the banks of the Rhine are so valuable agriculturally, that this care is taken of a little soil. I had expected, indeed, from the stories I had heard, to see every foot garnished with well repaying toil; but instead, were acres and acres almost waste, or fed upon by scraggy-limbed cows, or goats, and half covered with brush. These banks too sloped to the water, but unfortunately did not possess that particular exposure, or quality of soil, requisite to make the wine; and a single foot of that so cautiously cherished under one cliff, might be worth an acre on the opposite bank.

I do not object to the basket stories that they lack interest, or, indeed, have not enough of plausibility—but that they give an incorrect *agricultural* idea of the country.

The vine culture is much the same in Germany as in France. Particular localities furnish a choice vintage, and an adjoining field furnishes a worthless crop. The best wines are grown upon the immediate banks of the river;—the most noticeable vineyards are perhaps those upon the rocks opposite Remagen, and at Assmanshanson. They are found upon ledges, of but a few feet in width, and on the precipices opposite Remagen are in fact sustained in their crevices by osier work alone.

The vintage is later than in France, frequently so late as in November. The famous vineyard of Johannisberg is in full view of the river—a slaty yellowish soil, with vines of yellow sickly color. Its extent is only 62 acres, and it is attended with the utmost care. Its product, in good years, is 50,000 bottles—valued at nearly as many dollars! I need hardly say that it is the wine of princes and noble families;—that even the smallest quantity of the most indifferent vintage rarely finds its way into the market. The absurdity, therefore, of those small tavern keepers who put Joannisberg on their wine bills is only less pitiable than the ignorance of those who order it.

Rust in Wheat.—The Maine Farmer doubts that fungi are the cause of rust in wheat. He thinks the epidermis bursts, the sap runs out, and the seeds of the fungi then lodge in it and grow. The use of a powerful achromatic microscope would convince him that this opinion is error; for by it the clear, distinct, and regularly formed fungus plants are not only seen, but their thickly crowded, rounded heads are most clearly discovered through the transparent coat, while it is swelling upward from the pressure of their growth, and before it has burst open.

Preparing for Wheat.—Recent experiments indicate, that instead of plowing three times for wheat, as is usual with summer fallows, it is much better to plow but once; provided the work is done in the best manner, that is, very deep, and with very narrow slices. The time when this work is done is not essential—the cultivator is used solely for clearing the weeds and covering the seed. The success has been complete—but it may not be so well adapted to clays.

CHARACTERISTICS OF THE SEASON 1847.

THE spring opened late—the weather continuing so cold till May that vegetation made little or no progress. In fact, it was not till the 20th of June that Indian corn and other plants requiring a high degree of heat began to grow vigorously, in this latitude. But the lateness of the season was in one respect favorable—it retarded the foliage of trees till so late a period that there was no frost after the blossoms appeared. In consequence of this, the tender fruits—peaches, for instance—were more abundant in the northern part of the country than they had been for many years. For four or five weeks from the 20th of June, the temperature was steadily warm, and during this time so rapid an advance was made by crops in general, that they experienced no material check from several days of unseasonably cool weather, which occurred towards the latter part of July. August was for the most part only moderately warm. The fore part of September was favorable—there being no frost to affect vegetation till the 15th, by which time crops were generally so far matured as to suffer no injury.

As to moisture, different sections have been very differently affected; the clouds have been exceedingly capricious; for while the greater portion of the country has been rather unusually favored with seasonable rains, certain neighborhoods have been visited with very severe drouth. The variation has sometimes taken place in a striking manner. In some cases the districts that have suffered from drouth were quite limited in extent and surrounded by others which have had plenty of rain. In general, however, the drouth has occurred in narrow tracts extending nearly south-west and north-east. In this vicinity, there was sufficient rain through most of the season, and we believe the same remark may be made in regard to the vicinity of New-York, and the most southern part of the state generally; but between the two points named, viz., at Newburgh, and to the southwest of that place, a deficiency of moisture lessened the yield of most crops to a serious degree.

The *grass* or *hay* crop, taking the country together, was probably a full average one. There were deficiencies in some sections from the grass having been winter-killed, and in others from drouth.

Wheat, notwithstanding its unfavorable appearance in the early part of the season, gave, with few exceptions, about a middling yield; and from the large extent of ground occupied by the crop, the aggregate amount of this grain produced in the country, is probably not less than in any former year. In some sections the crop was considerably winter-killed, and it suffered in the west by the fly. Spring wheat, which was sown to some extent where the winter variety failed, and which is considerably cultivated in the northern section of this country and in the Canadas, generally yielded well.

Rye, *barley*, *oats*, and *buckwheat*, gave their usual returns. The latter crop is spoken of as particularly good in quantity and quality. All the small grains were generally secured in good order.

Indian corn—which it has been said, "forms the *back bone* of our husbandry," and it might have been added, of the people, too, in a great degree—has given a full crop. It will be remembered that this grain was, the last winter and spring, in great demand, and brought high prices for exportation to the British islands. This circumstance induced farmers in the eastern part of the country to plant very largely of this crop the present year. The product has been satisfactory, and we trust there will be no cause of complaint on the score of profits; but it should not be forgotten that the high prices of last year were occasioned by an almost unprecedented scarcity of breadstuffs in England, Scotland, and Ireland, and with the good crops which have there, as well as on the continent of Europe been obtained the present year, no such extraordinary demand can be expected to arise. Still the article has now been fairly brought into use in the countries mentioned; and from our improved modes of preparing the grain by kiln-drying, and the nice manner which is adopted of putting up the meal, it may be confidently expected that its consumption will continue, and that it will after a while be generally esteemed. In every view of the case we think there is a better prospect of opening a permanent and profitable trade with England in Indian corn, than with any other article of breadstuffs; because it cannot be successfully produced there, and is not much cultivated in any of the European countries, though wheat is grown largely by all those countries, and many of them have usually a large surplus for exportation.

Of the *potato* crop we hardly know what to say. It was planted to a great extent in all sections accessible to the large eastern markets. The tubers vegetated well, the vines grew vigorously and appeared perfectly healthy in this vicinity till the latter part of August. At that time the blight made its appearance, killing the tops and turning them black in the space of a few days, and shortly after the tubers began to rot. We are unable to state the extent of the disease as compared with former years. From what we have heard, it appears to have occasioned more damage in the eastern part of the country and in this state than heretofore.

In regard to the cause, prevention, or cure of the disease, we are not aware that any new light has been obtained the present season. If anything has been added to the general stock of knowledge by another year's experience, it is that all the nostrum and quack remedies which have been put forth in regard to the subject are worthless.

It will be noticed that the blight which precedes the rot, came on about a month later the present season than in 1846. From this circumstance, and the healthy appearance, up to a late period, of the crop of the present year, great hopes were entertained of its exemption from attack.

In regard to the greater liability of some kinds to rot, the same evidences have appeared this season as formerly. From the accounts we receive, the Mercers, ("Neshannocks" or "Chenangoes,") suffer most, and next to this variety the Carters.

We have heard of several instances where early kinds planted on favorable soil, early in the season, got fully matured, so that the vines had died naturally, at the time the blight occurred. In such instances we believe the crop has remained sound; though on the same farms, the same kinds that were planted so late that the vines were killed by the blight, have rotted to a great extent.

WOOL MANUFACTURE.—The Middlesex company at Lowell, daily consume about *six thousand* pounds of wool. The company has already purchased of the present year's clip, nearly *two million* pounds.

THE POTATO ROT is making fearful ravages in several parts of Ohio—from three-fourths to nine-tenths being already destroyed in some neighborhoods.

NOTICES OF NEW PUBLICATIONS.

.....

TRANSACTIONS OF THE MASSACHUSETTS HORTICULTURAL SOCIETY, for the years 1843, 4, 5, 6; to which is added the Address delivered before the Society on the 15th of May, 1845, at the dedication of their hall.

This wealthy, influential, and useful Society was incorporated in 1829. It has been the instrument of awakening a great interest in the culture of fruits, and has been the cause of important improvement, not only in horticulture, but in the general embellishment of the country and country residences. Besides the good it has accomplished in the pursuit of its legitimate objects, the public is indebted to this society for the foundation and improvement of the Mount Auburn Cemetery, an object of cherished interest to the people of Boston and vicinity. The "Transactions" contain the principal doings of the Society since its organization. The mechanical execution of the work is highly creditable to the publishers, Messrs. DUTTON & WENTWORTH, Boston.

.....

EWBANK'S HYDRAULICS AND MECHANICS; a descriptive account of Hydraulic and other Machines for Raising Water, ancient and modern, with observations on various subjects connected with the Mechanic Arts; including the progressive development of the Steam Engine: in Five Books, illustrated by nearly three hundred engravings: By THOMAS EWBANK.

Messrs. GREELEY & McELRATH, of New-York, have commenced the republication of this work, which they propose to complete in eight numbers, at twenty-five cents each. We have received the first number, which is got up in excellent style. The engravings are very neat, and convey correct ideas of the objects they are intended to represent. The work has the reputation of being the best extant, which treats of hydraulics and mechanics.

.....

The Commerce and Navigation of the Valley of the Mississippi; and also that appertaining to the City of St. Louis: considered with reference to the improvement by the General Government, of the Mississippi river and its tributaries; being a Report prepared by authority of the Delegates from the city of St. Louis for the use of the Chicago Convention of July 5, 1847.

This pamphlet of thirty-two pages, embraces a striking exposition of the immense natural resources, present business, and important future prospects of the Great Valley of the West. We have seldom seen so many valuable statistical facts compiled in so small a space.

In the increase of population, business, and wealth, the world probably affords no parallel to the Mississippi valley. We are informed that at the first census, in 1790, the population of this valley "did not exceed 200,000. In 1800, it had increased to about 560,000; in 1810, to 1,370,000; in 1820, to 2,580,000; in 1830, to 4,190,000; in 1840, to 6,370; and in 1847, according to the preceding average ratio of increase, it exceeds 10,520,000. In the year 1850, according to such ratio, it will exceed twelve millions, and be about equal to the population of all the Atlantic States."

In regard to the early navigation of the Mississippi, we are told that the first appearance of a keel boat on this stream, above the mouth of the Ohio, was in 1751, "when a fleet of boats commanded by Bossu, a captain of French Marines, ascended as far as Fort Chartres." One of these boats is said to have "run against a tree," which burst the boat and let in such a quantity of water that it sunk in an hour's time." This is supposed to have been the first boat snagged on the Mississippi. "From three to four months was the time consumed at this period, and for many years afterward, in a voyage from New Oleans to the settlement in the vicinity of St. Louis; a voyage occupying a steamboat in 1819 twenty-seven days, but which of late has been accomplished in less than four days!" Steam navigation on the Mississippi was commenced in 1817. "In 1834, the number of steamboats on the Mississippi and its tributaries, was 230, and their tonnage equal to about 39,000. In 1840, the number was 285, with a tonnage of 49,800. In 1842, the number was 450, and estimating their burthen at an average of 200 tons each, their tonnage was 90,000. In 1843, the number was estimated at 572; tonnage 134,400. In addition to the steamboats, there are estimated to be employed on the same rivers, about 4,000 keel and flat-boats."

The receipts at New Orleans from the upper country, for the year 1846, are put down at $77,193,464.

The following table shows the length of steamboat navigation on the principal rivers of the west:

Mississippi, from the Gulf to St. Anthony's Falls,	2,200 miles.
Missouri, from its mouth to the foot of the Rapids,	2,000 "
Red River, to head of Navigation,	1,100 "
Ohio, to Pittsburgh,	1,000 "
Arkansas, to mouths of the Neosho and Verdigris,	630 "
Tennessee, to Chattanooga,	485 "
Wabash, to Lafayette,	300 "
Illinois, to Ottawa,	250 "
Cumberland, to Nashville,	200 "
Osage,	200 "

"A steamboat leaving Pittsburgh, and going to New Orleans and being there chartered to go up the Mississippi as high as the Rapids, and thence returning to Pittsburgh, will perform a regular voyage of about 8,450 miles, a distance nearly equal to crossing the Atlantic three times."

.....

The Physiology of Digestion, with Experiments on the Gastric Juice: by WILLIAM BEAUMONT, M. D., Surgeon in the U. S. Army. Second Edition; published by CHAUNCEY GOODRICH, Burlington, Vt.

This work comprises an account of some of the most curious and instructive experiments which have ever been made on the physiology of Digestion. These experiments were made *in the stomach of a living and healthy man*, who, by the accidental discharge of a musket, received a wound which opened the stomach, and which never entirely closed. Through this aperture, the process of digestion could be observed and actually *seen*. Different substances were at various times introduced into the stomach through the opening, and having remained there for different lengths of time, were withdrawn, and the change which they had undergone carefully noted. The *gastric juice* was in several instances taken from the stomach, and many interesting experiments made with it in regard to its effect on articles of food. These experiments extended through a period of several years, and were made under the observation of many distinguished physicians and men of science. The book concludes with a summary of inferences deduced from the experiments and observations. Some of the most important of these inferences are as follows:

That *animal* and *farinaceous* aliments are more easy of digestion than *vegetable*.

That the susceptibility of digestion does not, however, depend altogether upon *natural* or *chemical* distinctions.

That digestion is facilitated by *minuteness* of *division* and *tenderness* of *fibre*, and retarded by opposite qualities.

That the *ultimate principles* of aliment are always the same, from whatever food they may be obtained.

That the *quantity* of food generally taken, is more than the wants of the system require; and that such excess, if persevered in, generally produces, not only functional aberration, but disease of the coats of the stomach.

That *bulk*, as well as *nutriment*, is necessary to the articles of diet.

That *oily* food is difficult of digestion, though it contains a large proportion of the nutrient principles.

That the *time* required for the digestion of food is various, depending upon the quantity and quality of the food, state of the stomach, &c.; but that the time ordinarily required for the disposal of a moderate meal of the fibrous parts of meat, with bread, &c., is from three to three and a half hours.

That stimulating condiments are injurious to the healthy stomach.

That the use of ardent spirits *always* produces disease of the stomach, if persevered in.

That the natural temperature of the stomach is 100 deg. Fahrenheit.

That exercise *elevates* the temperature; and that *sleep* or *rest* in a recumbent position, *depresses* it.

That the *agent* of chymification is the *gastric juice*.

That it acts as a solvent of food, and alters its properties.

That it contains free *muriatic acid* and some other active chemical principles.

That *gentle exercise* facilitates the digestion of food.

That the motions of the stomach produce a constant *churning* of its contents, and admixture of food and gastric juice.

That these motions are in two directions, transversely and longitudinally.

That *no other* fluid produces the same effect on food that gastric juice does; and that it is the only solvent of aliment.

This book may not be entirely new to all our readers, as it is several years since the first edition was published; but we recommend it as an interesting and instructive work to such as are not already familiar with the subject on which it treats. A few copies for sale at this office.

AGE OF CATTLE AND SHEEP.

IT is generally supposed that the age of cattle and sheep can be accurately determined by the teeth, till after they are five years old. These animals, as nearly every farmer knows, have at their birth, or shortly afterwards, eight incisor or front teeth in the lower jaw, called *milk teeth*, which at various periods fall out and are replaced by others called *permanent* teeth. The common theory in relation to this change is, that the two centre teeth are dropped soon after the animal is a year old, and are followed by two permanent teeth which reach their full size about the time the animal is two years old; that two other milk teeth, (one on each side of the two permanent teeth which first appear,) are dropped each succeeding year. and are followed by permanent ones, till all the milk teeth are gone, and the animal becomes "full mouthed," as it is called, at five years old.

Observation long since convinced us that this rule does not afford a sure criterion of the age of these animals. We have known several instances where cattle and sheep were, from their teeth, supposed to be from one to two years older than they really were. The circumstance has frequently led to difficulty, especially in awarding premiums, the idea being entertained that there was some mistake or intended deception in regard to the age.

A few years ago, an individual in the state of Ohio, purchased of a highly respectable breeder in New-York, a fine three-year-old Durham bull. On his arrival in Ohio, he was exhibited at a cattle-show, where he was examined by many persons, several of whom, on looking at his teeth, declared him to be five years old. It was in vain that a certificate, in the handwriting of the breeder was shown, stating him to be but three years old—it would not satisfy the critics, who insisted that there had either been collusion in regard to the bull's age, or else the purchaser had "*got Yankeed.*" Yet the testimony of the breeder, we presume, would have been regarded as sufficient in a court of law, to establish the fact of the animal being but three years old; and there was nothing, except the appearance of the teeth, to indicate that he was older.

Cases of the same kind might be cited in regard to sheep; and several farmers and breeders have assured us that good or bad feeding will frequently cause a variation of a year in the appearance of their teeth.

A French veterinary journal has lately brought out some valuable facts in relation to this subject. It appears that on the 15th of April, 1846, an agent of the government purchased a two-year-old Durham bull, at the dairy of the Royal Stud, at Pin. Shortly after the purchase, the bull was exhibited for a premium, but the judges refused to award him the prize, it having been specified that the animal should be but two years old, and they, believing this one to be four years old and upwards, as he had all his permanent teeth. The decision, as may well be supposed, created some stir, and to settle the point in dispute, letters were addressed respectively, to the Directors of the Royal Dairy at Pin and Poussery, containing the following questions:

"1. Are there in the dairy over which you preside, cows or bulls which have cut the whole of their permanent teeth prior to their fifth year, and how many?

2. Are there any which have cut all prior to their fourth year?

3. Are there any which have cut their teeth earlier?

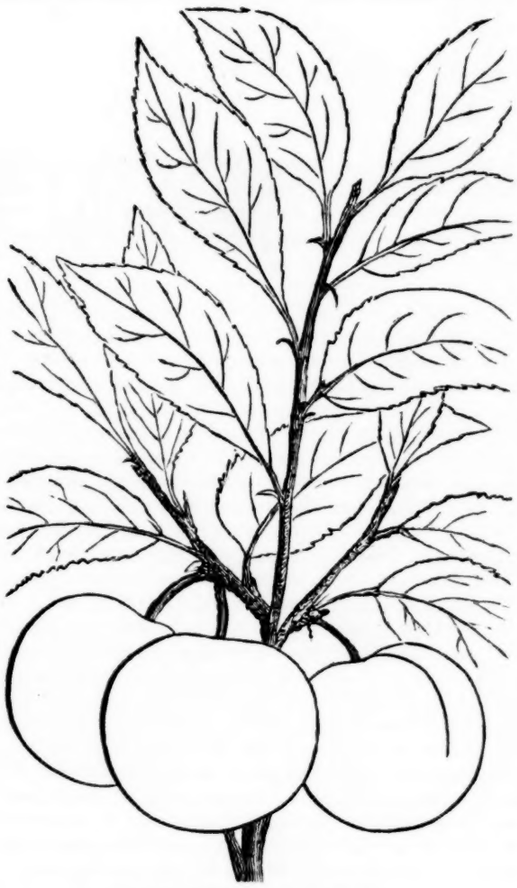
4. At what medium age, according to your personal observation, do Durham oxen, bulls especially, shed the whole of their milk teeth?"

The answers to these questions by each of the Directors, showed that in each of the Royal Dairies there were ten animals, viz., at Pin, one bull and nine cows, and at Poussery, two bulls and eight cows,—which had cut the whole of their permanent teeth prior to their fifth year; that in the latter case all the animals had their permanent teeth prior to their *fourth* year, and that in the dairy at Pin, there were seven animals —one bull and six cows—in the same case; that at Pin there were four cows, and at Poussery one bull, which had cut all their permanent teeth before they were three years old. A case of a cow at Poussery is mentioned, which at two years and seven months old, had six permanent teeth, and two months after, that is, at two years and nine months, had put out her corner teeth, making the full number of permanent ones. The date of the birth of most of these animals is given, copied from the registers kept at the establishments, so that there is hardly a possibility that there could be any mistake. The Directors further state that the cattle of the Durham breed, kept at the dairies under their charge, usually shed the whole of their milk teeth between their third and fourth years.

The variation in the time at which cattle and sheep shed their first teeth, is attributable to two causes—the natural constitution of the animal, and the manner in which it has been fed and reared. Some animals, from these causes, reach maturity much sooner than others, and their dental organs, sharing equally in the precocity of the system, exhibit the condition which belongs to those of older animals, which are longer in arriving at their full growth.

We respectfully commend the above remarks to the attention of breeders of animals, confident that observation will fully confirm the correctness of the conclusions put forth.

Provide good shelter and proper food for all animals.



THE CHERRY PLUM.

The above is a cut of the Cherry plum, sometimes called the Early Scarlet, and known in Europe as the Myrobolan. Mr. Downing describes this fruit in the *Horticulturist* as follows:

"The Cherry Plum is not a high-flavored fruit; it is only what may be called one of pleasant flavor. But it is, we believe, the earliest of plums; it ripens at a season when fruit of every kind is exceedingly scarce; and it is quite an ornamental as well as acceptable addition to the desert in the month of July."

It is considered a poor bearer; but Mr. D. states that Mr. Samuel Reeve, of Salem, N. J., has adopted a method by which the variety is made productive, and he finds its culture as a market fruit very profitable. He supposes its usual non-productiveness is owing to too great a production of leaves and wood. "He therefore," it is said, "*transplants* his bearing trees every five or six years. In this way, the over-luxuriance is checked, and an abundant crop of fruit sets and ripens every year." It is stated that Mr. R. sends this kind of plum to the Philadelphia market early in July, when it brings from five to eight dollars per bushel. Mr. Downing suggests that *root-pruning*, performed every two or three years, would answer the same purpose as transplanting.

Application of Salt to Plum Trees.—On page 255 of the present volume of the Cultivator, it is stated that Judge Cheever had lost three plum trees from putting salt round them. Last winter I had occasion to empty some fish barrels, and I directed the man to put the contents round some plum trees that had not grown much the previous season. He put four pailsful (the common painted pail,) round four trees. The brine and salt together came in immediate contact with the body of each tree. I shortly after saw the communication of Mr. Shurtleff in the Horticulturist, and considered our plum trees as bad as dead. But they are worth a good many dead ones, and have made good shoots this season, some of which are two feet long. The trees were set out in the spring of '46. It may be that the frozen state of the ground prevented the salt and brine from penetrating, and allowed it to be washed away before the opening of spring. H. W. Crosby. *Easton, Pa.*

BANKING UP THE TRUNKS OF TREES.

As a subscriber and young farmer, I take the liberty of applying to you for information respecting some old trees, whose roots have become exposed by the washing of the water along shore, and which I am now about to cover with fresh earth, and build a wall to protect the sea from making further inroads. On the principle that covering the base of a tree with earth destroys it, I am apprehensive that the same may occur where the roots have been so long exposed as in this case, (say 10 or 15 years.)

If the above query comes within the range of your experience, please inform me through the pages of the Cultivator, and add to the much valuable information already obtained therefrom by

Your obedient servant, D. L. Suydam.

Remarks.—A difference between the roots and the trunk of a tree, is, that while the roots, though constantly immersed in water, will not absorb any more than the best healthy condition requires; the bark of the trunk similarly situated, soon becomes overcharged, and unless relief is afforded, decay follows. In small trees, and in branches buried as layers, this relief is obtained by the part itself gradually changing in character to that of a root. The older the tree becomes, the more slowly this change takes place, either from the nature of a trunk to a root, or vice versa. Hence caution must be used in banking the earth high round the stems of large trees.

The time required to convert the large roots of a full grown tree to the nature of the stem, is unknown to us. It may be questioned whether in the cases above-mentioned, this change has yet been more than partial; if it has not fully taken place, the hazard of banking up would be lessened. In order, however, to insure their safety, and to allow them gradually to assume their former character, it may be prudent to place small stone or gravel in immediate contact with the roots as they are covered, which, though it may exclude the light, will permit the surface to remain dry during most of the time, if an outlet below is provided for the drainage of these beds of stones or gravel.

The above inquiry has been accidentally neglected for a few months.

Winter Apples in Ohio.—In southern Ohio, a selection of good-keeping winter apples appear to be needed, quite different from the old standard sorts of New-England and New-York. The Baldwin, a good keeper in New-Engladd, is there only an autumn fruit. Would not the Newtown pippin, Northern Spy, English Russet, and Tewksbury blush, prove good keepers in Ohio?

Profits of Fruit.—P. Barry, of the Genesee Farmer, says that when in the garden of Geo. Hoadley, Esq., of Cleveland, the present season, the crop of a single cherry tree was sold for $10. The tree was eleven years old, and not larger than seven-year planted trees at Rochester.

The Norway Spruce.—Robert Nelson, of Newburyport, Mass., says that *manure* is almost death to the Norway spruce, which is most fond of sandy, or still better, of gravelly soil.

THE CULTIVATOR TO ITS READERS.

THE present number closes the Fourth Volume of the New Series of THE CULTIVATOR, being the Fourteenth from its commencement; and according to our original terms, *all subscriptions*, except such as are paid in advance, *will expire with the year*. We cannot permit the occasion to pass by, without tendering our acknowledgments to our numerous friends and patrons who have kept us company through the year,—those who have so effectually aided us as contributors, and those who have so kindly assisted us in extending the circulation of our Journal. It has been a subject of gratulation to us, that notwithstanding the multiplication of agricultural journals, so many of our patrons have adhered to us for such a series of years, numbering, as we still do, among our staunchest friends and supporters, many who enrolled themselves on our list, when we first commenced the old Genesee Farmer in 1831; while the annual additions of new subscribers, from every section of our extended territory, prove that our efforts are not without the decided approval of the friends of improved agriculture everywhere; and now that the period of our mutual engagement is again closed, we are unwilling to part with any of our friends, and respectfully ask them to renew their subscriptions, and keep us company another year. We ask them, as soon as practicable, to authorise our Agent, or the Postmaster, to forward us their names for the coming year.

To our subscribers, and indeed to the agricultural public generally, the course and character of "THE CULTIVATOR," is too well known to need a word of explanation. Placed, by the unanimous consent of the farming community, at the head of the Agricultural Journals of this country, the extent and variety of its contents, its list of contributors at home and abroad, unrivalled for numbers as well as for practical and scientific skill, the superiority of its practical execution, and the number and excellence of its illustrations on every subject connected with agriculture, have all contributed to render it a favorite with all classes interested in the cultivation of the soil. This elevated standing it will be the uninterrupted effort of the conductors to maintain, and at no time has the means for doing this been more ample than at present. To extend the means of knowledge; to inculcate correct theory and sound practice; to furnish the reflecting with matter for thought, and the practical man with instruction immediately available, has been, and will continue to be, the great end of this periodical.

We are anxious to extend, or even double, the present circulation of "THE CULTIVATOR," because we believe that the best interests of the country would be promoted by such a result. But in doing this, we do not wish to interfere with, or occasion the loss of a single subscriber to any other agricultural paper. The field of labor before us is a broad one; and to all who are engaged in cultivating it, we cordially tender the right hand of fellowship, and wish them every success. There cannot be less than two million families in the United States, who would be benefitted far beyond the expense, by the receipt of an agricultural paper; and yet, it is believed, it would be a large estimate to say that one hundred thousand copies of such periodicals are now circulated. It cannot, therefore, be doubted that there is ample room for the labors, and for an extension of the circulation of all.

Our thanks are particularly due to Postmasters and to other gentlemen, in all parts of our country, who, feeling an interest in the success of our agriculture, as the great source of national and individual prosperity, have kindly brought our work to the notice of their friends, and otherwise interested themselves in procuring subscribers. We respectfully ask a continuance of their kind offices.

TO CORRESPONDENTS.—We should do great injustice to our feelings, did we fail to tender our heartfelt acknowledgments to our numerous correspondents, by whose aid we have been enabled to give an interest and practical value to our pages, which could in no other way have been obtained. It will be seen, by the Index to our list of contributors, published with this number, that they amount to about three hundred, embracing gentlemen in almost every state of the Union, in the British Provinces of Canada and New Brunswick, and in England, Scotland, France, Germany, Holland and Italy. We know of no other periodical which can compare, in this respect, with "THE CULTIVATOR." We ask, and look confidently for a continuance of these favors, not only from those who have heretofore contributed liberally, but we ask those also who have, through our pages, enjoyed the benefit of the experience of others, and contributed nothing themselves, now to become contributors to the fund of information which we are dispensing to so large a circle of readers. We want FACTS in relation to every branch of American husbandry—the increase and application of manures—the tillage of the soil—draining and irrigation—the culture of all the various crops—the management of grass lands—the breeding, rearing, and feeding of domestic animals—the selection and culture of fruits, vegetables and flowers, &c., &c.—the making of butter and cheese—and all matters of interest to farmers' wives and daughters, as well as to the farmer and his sons. The experience and observation of hard-working, common sense farmers, on all these subjects is wanted; and we hope to receive such an abundant supply for our next volume, as will render it more valuable than any that has preceded it.

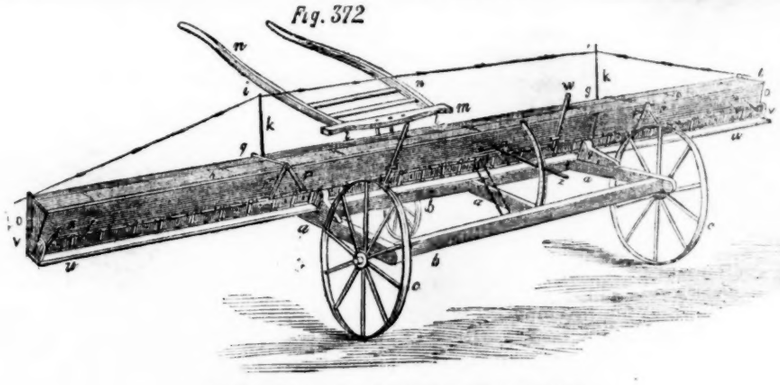
TO AGENTS.—We complete our list of Agents this month. We have endeavored to make it as perfect as possible; still, there are doubtless more or less errors and omissions. Should any Agent, therefore, not find his name in the list, he will consider its omission accidental, and do us the favor to act as usual. If, as is probable, some of the Agents in the list, have removed, or decline to act for the ensuing year, we shall be greatly obliged to any of our readers who will supply his place, by taking upon himself the responsibility of making up a club of subscribers in his neighborhood.

☞ As we are dependent solely upon our local Agents for the annual renewal of subscriptions, the more we have of them the better, and we therefore invite all such of our readers as are disposed to aid us in extending the circulation of the "The Cultivator," so far to become Agents as to use their influence to procure subscribers for the next volume.

DECEMBER.—This will be found to be the best month in the year to obtain subscribers to "THE CULTIVATOR;" and we trust our Agents will give as much attention to the matter as circumstances will permit.

☞ The Title-page and Index to the present volume of "The Cultivator," will be issued with this number.

Fig. 372



BROADCAST SOWING MACHINE.

In our August number we spoke of a machine used by J. DELAFIELD, Esq., near Geneva, for sowing grain broadcast. Believing that machines of this kind may be introduced with advantage on many farms, we copy from a Scotch work, (*Stephens' Book of the Farm,*) the above cut, together with the following remarks:

"The Broadcast Sowing Machine has now come into pretty general use, especially in those districts where the arable system is under the best management, and on large farms is nearly superseding the process of hand sowing. It not only sows all the white grains, wheat, barley, oats, when sown broadcast, in a very uniform manner, and with any desired allowance per acre; but it serves in a superior manner for grass-seeds, in point of distribution, and, in the case of windy weather, is greatly superior to hand sowing. This last advantage arises chiefly from the low position of the discharging orifices, as compared with the height of the hand in sowing; but partly, also, from the more direct discharge of the seed from the machine; its velocity of discharge, likewise, and the distance it has to fall, being always uniform. The nice gradation of the discharge is one of its chief qualifications, for it may be adjusted to sow any required quantity per acre, between the lowest and the highest, that may be judged expedient, and in all cases, from the uniformity of the distribution, a considerable saving in seed may be effected."

The seed-chest is usually made eighteen feet long. This length rendered it inconvenient to pass gateways; and to obviate the difficulty, the chest is now made in sections, the middle part being nine feet, and the extremes four and a half feet each, so that it may be readily folded up to the width of nine feet. We omit a minute description of the machine, as our object is principally to call attention to the general plan. The machine used by Mr. DELAFIELD is manufactured by P. SEYMOUR, Jr., of East Bloomfield, Ontario county. It is probably as good or better than the Scotch one, from which our cut was taken. Particulars in regard to the construction of Mr. S.'s machine, can doubtless be obtained by applying to him.

EXHIBITIONS OF AG. SOCIETIES.

NEW-YORK. ONTARIO COUNTY.—Show held at Canandaigua on the 12th and 13th of October. The weather on the first day was very unfavorable; but the show notwithstanding was such as indicated increased attention to the improvement of stock. There was a good display of cattle, among which were several fine Durham bulls, several yoke of good working oxen, and a good show of horses, swine, and sheep. The display of fruits, flowers, manufactures, specimens of mechanical ingenuity, &c., was large.

WAYNE COUNTY.—Show at Lyons, Oct. 6th and 7th. From the reports of committees, published in the *Sentinel*, we infer that the show was in all respects creditable to the farmers of the county. There appears to have been a large display of stock; and from the list of premiums there seems to have been no deficiency in the other departments.

CLINTON COUNTY.—Show held at Keeseville on the 5th of October. The *Keeseville Republican* says—"the universal expression was that in the extent and variety of productions exhibited, the number of people present, and the spirit and animation which characterized the whole proceedings, this fair far exceeded anything of the kind that has ever before been held by the Society."

QUEENS COUNTY.—The sixth exhibition of this Society was held at Hempstead on the 8th of October. The weather was very unfavorable. The *Inquirer* says: "The rain commenced falling in torrents at an early hour, and continued till evening. Under such circumstances it is remarkable that there should have been so much for exhibition as there was. The stock was generally good, some parts fine. Other parts of the show were highly creditable to the county. The crowd in attendance was great—being from all parts of the county, many from Suffolk, Kings, New-York city, and some from more remote places still."

CONNECTICUT. MIDDLESEX COUNTY.—Show held at Middletown. From the report of the committees, published in the *Sentinel and Witness*, we learn that the exhibition was large—fully equal, we presume, to any former year. We notice, by the awards of premiums, that the use of bones, as manure, of which some account was given last year, has been continued with the same favorable results the present year. ENOCH COE obtained, it is said, twenty-three bushels of rye per acre, by the application of twenty bushels of bone-dust, on land which, the committee say would not, in their opinion, have produced more than five bushels per acre under "ordinary management." The address to this Society was by Rev. F. J. GOODWIN. We shall notice it more fully hereafter.

OHIO. TRUMBULL COUNTY.—We are indebted to our friend GEORGE HEZLEP for an account of this show, which was held at Warren on the 13th and 14th of October. This was the second exhibition of this Society, and appears to have been well attended, and the display of stock of all kinds, horticultural productions, manufactured articles, &c., is represented to have been large, and of a character which did honor to the citizens of the county. The address was by Prof. E. P. BARROWS, of the Western Reserve College.

PENNSYLVANIA. SUSQUEHANNAH COUNTY.—Show held at Montrose, October 19th. From an account published in the Montrose *Register*, it appears that the exhibition was interesting and encouraging. A premium was awarded for a crop of 119¾ bushels of Indian corn, produced on one acre; also for a crop of ruta-baga, 520 bushels produced on half an acre.

THE CAST IRON PLOW.

AN article has been published in the last volume of the Transactions of the New-York State Agricultural Society, giving statements of the history of the Cast Iron Plow, which contains serious errors. As the improvement of the plow has a very important connection with the history of agricultural improvement, it is proper that these statements should be noticed. Although the volume has been published some months, the article alluded to escaped observation until very recently.

The author of the article, says—"Thus, about the year 1790, the plow in England was perfected to the point that it was made entirely, in its body, of cast iron. A single improvement yet remained to be effected; a greater hardness in the share; and this was made by Robert Ransome, [of Ipswich, England,] who in 1803, took out a patent for *case hardening*, or what we term *chilling* the points and edges of the share." "It will thus be seen that the cast-iron plow is wholly an English invention."—"We now come to a very important improvement in the material and manufacture of plows in America, which so cheapened their construction.—This important improvement which I allude to, is the cast-iron plow complete," &c. "*a* Mr. Newbould, an ingenious farmer"—"to him should be awarded the honor of its *introduction*." Yet the same article states, "he took no interest in getting it into general use."

The same article further states, that "Peter T. Curtenius, of the city of New-York, kept plows for sale as early as the year 1800, the shares of which were of cast-iron; but whether these were got up by himself or made from Mr. Newbould's patterns, I have not yet been able to ascertain." "These plows were highly approved of, as may be seen by reference to an article on the subject by Col. John Smith." This article is in the old N. Y. Transactions—the volume is before us, and these are Col. Smith's words:—"It is cast in the *form of a Dutch share*, after the best model that could be procured by the society, [and therefore had nothing to do with "Newbould's patterns,"] with this exception, that the edge is not complete, and not so wide by about three inches as it will be when finished by *the false edge, which is made of wrought-iron and steel, and fastened on with rivets*"!! "They may be had of Mr. Peter T. Curtenius, in New-York, either with or without *the edge, which is made of wrought-iron and steel*." In other words, it was *a cast-iron Bull plow*, with a wrought-iron and steel edge, neither more nor less, as every old farmer acquainted with the old Bull plow, must see at a glance.

Again, we are told, "Mr. Peacock, of New-Jersey, made a great improvement in plows, as early, I am informed, as 1805, by substituting the cast-iron for the wooden mouldboard. The form of this, however, and the manner of putting his plow together, were very imperfect." The article further adds, "In the year 1808, Peacock's plow was so far improved as to be made, share and mouldboard, both of cast-iron." This appears to be quite an error. Harris, in Cayuga Co., either manufactured, or kept the Peacock plow for sale, in 1814 or 1815, and we have the authority of some of the most eminent farmers of that county, that these plows had a wrought share, like the old Pennsylvania plow.

Again, "Mr. Edwin A. Stevens, of Hoboken, New-Jersey, took up the plow in 1817, and for nearly four years, devoted his ingenious talents to its improvement. Mr. Stevens was the first in this country to make use of the process of cold chilling the base of the land-side and lower edge of the share—a most important improvement, which was also embraced in his specification for a patent." This patent was obtained in 1821.

Now, there is ample evidence, which can be furnished from the best witnesses now residing in Cayuga county, N. Y., that Jethro Wood chilled his cast-iron edges long before, but he appears never to have thought of patenting that process.

Such errors as these, must seriously weaken the confidence of the reader in the accuracy of other statements in the article.

An object of the writer appears to be, not only to deprive Jethro Wood of all merit, but to represent him as a wilful imposter, which is done in these words:—"His [Newbould's,] was undoubtedly the first cast-iron plow ever used in the United States, and to him should be awarded the honor of its introduction, although thus far it has been generally accorded to Jethro Wood, of New-York, who had the shrewdness to get out a patent for one in 1814. He undoubtedly derived his idea from Mr. Newbould—who took no interest in getting it into general use—or from those of English manufacture, and was never entitled to the least merit as the originator or improver of the cast-iron plow. Mr. Newbould made his improvement without any knowledge of the progress in the same direction, in England." Why does the writer extend this charity to Newbould, but deny it entirely to Wood? No evidence for this heavy charge is given. Such random assertions should not be made by an impartial historian.

But what are the facts of the case? Fortunately, we have evidence of the very strongest character,—evidence which stood the test at the final trial of Wood's patent,* before the United States Court, at Albany, in 1845, where the following points in the invention were triumphantly sustained;—and which prove beyond cavil, that Jethro Wood was substantially the inventor of the modern improved cast-iron plow.

1st. The form of the mould board;

2d. The construction of a standard of cast iron for connecting the mould board with the beam;

3d. The cast shoe or edge, which is fastened without screws;

4th. Fastening the plow-handles by means of cast loops;

5th. The manner of fastening the landside to the mould board without screws.

These were mainly the improvements which have so cheapened the construction of plows, "that those for one horse, strong and well made, after the most improved patterns, can now be had in New-York at $2 to $4 each, and a two-horse plow from $5 to $7." These improvements, by placing the best plows within the reach of the smallest farmer, have been of incalculable benefit to the country, and been worth millions in the aggregate—yet we are told in this article, that Jethro Wood "was never entitled to the least merit as the originator or improver of the cast iron plow"!! What confidence can the reader have in the accuracy of such a history, where mere assertion, tending to injure the memory of a worthy man, as well as eminent

* This patent was obtained in 1819—with his previous patent of 1814, no one has had anything to do for nearly 30 years.

benefactor to his country, is placed in direct opposition to incontrovertible evidence, bearing the test of the most rigid scrutiny, in a United States Court.

It has often been the case with eminent inventors, that their improvements are first opposed and ridiculed, and when triumphant, they are denied the merit. It was so with Fulton—it was so with Whitney—and it has been so with Jethro Wood. One of the hardest things he had to overcome was the prejudice against "*pot-metal!*" Nearly all his friends discouraged him—they were afraid of the shoe, and afraid of the projection connecting the mould board to the beam. He was even publicly insulted for intimating that *pot-metal* would stand when used as a plow-share. One of his friends and neighbors had so little confidence, that he tried for a long time to break one of the first cast edges or shoes, by running it against fast stones and the hardest gravel banks. The discredit, as it was then supposed to be, was fully accorded to him—the merit, as it is now found to be, is denied him.*

In the article before us, we are told that in 1796, Newbould made "the cast-iron plow *complete*." Yet we are told that Peacock made "*a great improvement*" in 1805, "by substituting cast-iron for the wooden mouldboard." Again, "Robert Ransom took out a patent for *case hardening* in 1803." Edwin A. Stevens did the same in 1821. Yet we are told the latter is "a most important improvement." These striking inconsistencies appear to have originated in a wish to give credit to all; but why is the evidence, which to every properly informed person is as clear as light at noonday, that Jethro Wood contributed more than all to the effectual introduction of the cast plow, thrown entirely aside, and mere assertion substituted?

These remarks are made, not for controversy, but solely for the purpose of correcting the erroneous history of the plow, which, it is to be regretted has found its way into the Transactions of the State Agricultural Society, and for rescuing from most unjust censure the memory of a worthy man, who spent the prime of his life, in the face of great difficulty and prejudice, and with little pecuniary recompense, in introducing one of the most valuable improvements of the age.

☞ Will the Far. Cabinet, and other papers who have copied the article from the Transactions, please copy the substance of the preceding facts. J. J. T.

* On the last page (332) of the 4th volume of the Memoirs of the Philadelphia Society for promoting Agriculture, is Barnard's advertisement, with a plate of Wood's first patented plow annexed. He says:—"The mould board, *share*, and landside, are cast iron. The cast shares are furnished at 60 cents each, and *warranted* not to break, even in the most stony soil." Wrought shares were at $2. This volume bears date 1818, about one year *before* Wood's last patent.

This would indicate that the cast share was then new, and that Newbould's and Peacock's pretended cast shares were unknown within twenty miles of where the former lived; although his plow had been invented twenty-two years.

THE FARMER'S NOTE BOOK.

TOPPING CORN.—Near the road leading south from Auburn, I lately observed several fine fields of Indian Corn, apparently belonging to different farmers, which was *topped!* I had long since supposed that the wastefulness of this old practice was generally understood in western New-York; but it seems that a little more admonition may be useful.

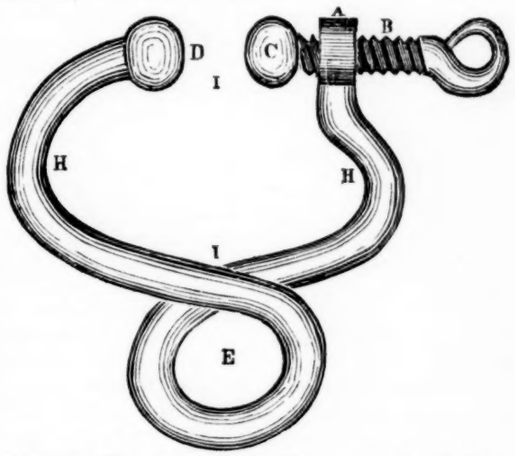
I remember that in years long gone by, it was a rule not to begin to top till the tassels or stamens were withered: for observation had taught us that if that part was removed too soon, there would be no corn; but the loss sustained from stripping the leaves was not so evident, because there was always some grain, and four-fifths of a crop was sufficient to conceal the damage. At length, however, *experiments* were made, and these showed so great a loss that none but the ignorant or the obstinate continued the practice.

CH. WOODSON, of Virginia, had the tops and blades taken from several rows of Indian Corn, leaving the same number of rows untouched, and discovered when the grain was harvested, that the *corn* of the unmutilated part, weighed more than the *corn and fodder* put together, of the part that was topped and bladed. The proportionate loss is not given, but the language is emphatic, and he adds, "the whole labor of gathering and curing the fodder (no inconsiderable item,) was entirely lost."

JOHN LORAIN, of Pennsylvania, topped and stripped two rows of corn, leaving the row between them untouched. This last row yielded more than *nine bushels and a half*, and the average of the other two was rather more than *seven bushels and a half*. At this rate, when he had *thirty-eight bushels* to the acre *untopped*, he had *thirty bushels* to the acre when *topped and bladed*.

WILLIAM CLARK, jr., of Massachusetts, has made a more direct statement; and says the loss was "*twelve bushels and forty-six pounds* per acre," from which he deduced that "about *twenty per cent., or one-fifth part of the crop*, is destroyed by cutting the stalks in the way they are usually cut." D. T. *Cayuga Co., 10th month 25, 1847.*

.....



MESSRS. EDITORS—In looking over the February number of the Cultivator for 1844, some time since, I found a description of a "contrivance for the prevention of accidents from unruly bulls," in which description you mention "a strong iron or steel ring, which opens with a hinge and screw and passes through the bull's nose." This suggested to me a contrivance of which the above cut is a representation; and I had one made which answered the purpose so well, that I take the liberty of forwarding you a description with the cut, in order that you may give it an insertion in your valuable journal, if you think it might be of advantage to any of your subscribers.

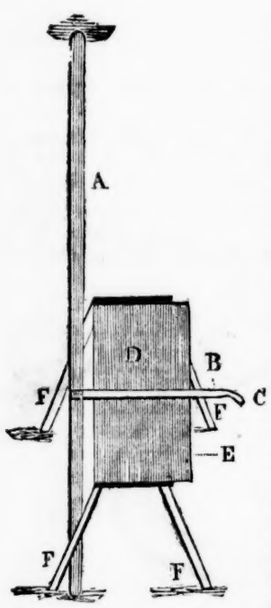
Take a piece of half-inch round iron, 15 inches long, and bend it as represented in the cut; have a nut cut at A, and the screw B to fit the same, by which screw

the balls C and D, after being introduced into the animals nostrils, are brought near each other, and firmly secure the "Detached Bull Ring," in the animals nose. The best method of leading " is by a strong stick, like a hoe handle," with a short chain at one end, to be attached to the ring at E.

The advantages of this mode are—that you do not cut or bore the cartilage in the nose, as in the usual way of ringing bulls—the ring is never in the way of the animal while feeding—and you use the same ring in leading or managing any of your stock. JOS. WM. RUSSELL. *Cape Girardeau Co., Mo., Oct. 25, 1847.*

.....

"DOUGH KNEADING MACHINE."—In the August number of your valuable paper, ("The Cultivator,") which I as a subscriber have the pleasure of reading, I notice the offer of a "Premium" by R. W. Jr., for "an effective machine for kneading and mixing dough, that shall be simple in its construction; easily cleaned, to occupy a small space, durable, and not to exceed $5 in cost, for one to work 5 lbs. of flour at a time;" and I will add to the above requisites,—one not likely to get out of order, no matter how much it may be used, and also one that would enable the operator to work 10 lbs. or more of flour at a time, should they desire it.



REFERENCES.—A, main shaft, or upright post; B, lever, which passes through the upright post at the top of the bench; D, the bench, standing by the upright post; E, biscuit board, resting on the bench, and prevented from slipping out of its place by strips of board nailed across the top of the bench at each end of the biscuit board; F F F F, legs of the bench.

The annexed cut is an attempt to represent the one which has been in use in my family more than two years, without its being in the least damaged in any of its parts. The cost of the one here attempted to be figured and described, will not be over *two dollars*, built in the neatest manner, and of the best materials. Mine was made and put up in less than half a day by one person.

It consists, first, in an upright shaft or post, four inches square, to reach from the floor to the ceiling, or joist at one end, or side of the cook room, the bottom and top ends of which are to be rounded, for the purpose of fitting into sockets of wood at bottom and top; a piece of good board of hard wood, with a 1½ inch auger hole through it, makes a good socket, one at bottom and one at top of shaft, and secured. The shaft must be loose to allow of being turned about.

The bench may be about 2½ feet long, 15 to 16 inches wide, and three inches thick. The legs of the bench may be of a sufficient height to suit the operator say about three feet from the floor to the top of the bench. On the top of the bench rests the biscuit board, secured temporarily to its place by strips of board nailed across the bench at the ends of the biscuit board, to prevent it from slipping while kneading the dough.

The lever is to pass through the upright post at a level with the top of the bench, by a mortise, 1¼ inches wide by 5 or 6 inches long, and secured in its place by a small iron pin; the size of the lever may be 2½ inches square, and rounded on the lower edge, for the purpose of cutting or pressing the dough; the end of the lever should be made to pass through the upright post loosely, so as to allow of an upward and downward motion. The post being loose in the sockets, allows of a forward and backward motion, the dough forming the fulcrum upon which the lever is made to operate, by taking hold of the outer end of the lever, (which should be reduced to a proper size for the hand, say 1¼ inches in diameter,) raising it up and bringing it up towards you, then pressing it down upon the dough and pushing it from you in the same motion, which cuts the dough down to the biscuit board, and by taking small parcels at a time, will soon thoroughly knead a large batch. The flour at first mixing would be better stirred up somewhat in a tray or wooden bowl, or tin pan, for the purpose, (which every family have in their possession,) and after having been so mixed in part with a large spoon or ladle, it may be turned out upon the biscuit board. The lever should be of hard smooth wood, to admit of being easier cleaned, which is easily done by taking out the iron pin that secures it in the post. The biscuit board should also be taken out and put away when not in use.

With the foregoing directions, &c., I am persuaded almost any person could rig up a good machine, which will save the female portion of the family a great deal of hard labor. The bread will be better and cleaner, as the hands need not be put into the dough, except for the purpose of forming the biscuits or loaf, as the case may be. I therefore respectfully present it *to all* the "good house-wives," whether "working women" or not. I would remark one thing further—that we have had no *sodden* bread since the above machine has been in use. J. A. C. *Baly's Neck, Talbot County, Md., Oct. 9, 1847.*

.....

HORSE-POWERS.—For the information of your correspondent, T. B., of Pleasant Hill, Ala., I would say that Warren's Horse-power can hardly be made, without very material alteration of the machinery, to gin cotton, either by the saw or roller gin, the velocity being very much too great. The best and cheapest horse-power for his purpose that I think he can find, is the Railway Horse-power, made by Mr. Ezra Whitman, Baltimore, at $75 for one horse, and $100 for one for two horses. The only objection that I find to it is, that the horses and mules ought to be shod, which is rather inconvenient in our flat country, where few or no smiths can shoe. But patent shoes can easily be purchased, and an ingenious negro blacksmith, or even a carpenter can put them on. Besides the horse-power costing as little, if not less, in first cost, the very material item of a building 25 or thirty feet square, and 1½ or 2 stories high, is also saved, as the Railway Horse-power can be worked in any shed or room of moderate size, and is certainly of equal, and many think (I myself among others,) of much greater economy of labor. Some who have used both this and the Lever or King-post power, maintain that with a Railway power, two horses will do as much work as four with the other power.

It is necessary, however, in order to adapt Mr. Whitman's power to ginning cotton, to have, instead of the large driving drum, usually furnished with it, of four or five feet diameter, one of 18 or 20 inches, which will give about the velocity he requires, and will also answer, when he has finished ginning cotton, to grind corn, drive Hussey's corn and cob-crusher, or Goldsboro's corn-sheller, which is an effective machine, as I can testify from experience, shelling, it is said 130 bushels clean corn per hour, and is fed by the basket of ear corn at a time.

LUCERNE.—I would also state, that lucerne has entirely failed in all the experiments I have heard of hereabouts. The only grass that I have found to stand our climate, is the orchard grass, and from limited but repeated experiments, I am pleased with the spurry, (*Spergula arvensis,*) for winter and early spring fodder, or grazing, but it will not grow at all in the summer.

MUTTON.—I do not agree at all with you, that Cotswold or Leicester would improve the quality of mutton and wool, unless the mutton be raised for sale. For eating, no mutton, in my humble opinion, (and I have eaten some mutton in my travels,) will compare for fineness of grain, and flavor and juiciness, with Merino, or grade Merino, and I have no doubt that as much Merino mutton or wool can be raised upon the same quantity of pasture or feed, as of any other breed whatever, and the wool does not require any praise at my hand. Besides, your Maine correspondent, I. McG., is in the immediate neighborhood of the best flocks of that breed.

GRASSES FOR THE SOUTH.—The Muskeet grass that was introduced into this state a few years since, proved, I believe, to be the *Holcus lanatus*, well known in Europe. As far as my experiments—and they have not been few—have gone, the best and only grasses that it is worth our while cultivating in the south, are rice, corn, oats, wheat, rye, and barley, and if all the time, money, and labor, that have been wasted in trying other grasses, had been spent upon the 2d, 3d, and 5th of the above list, our horses, hogs, &c., would have fared better, and our pockets would now be rather better filled. I am certain that mine would be. ROB'T CHISOLM. *South Carolina*, 1847.

.....

ROTATION.—Mr. J. D. BURDITT, of Norwalk, Huron county, Ohio, sends us the following plan for a rotation of crops. He says—"Most of my soil is what would be termed a clay loam, a small part of it a tenacious clay. I wish to ask whether the following rotation would be a good one?

First year, corn, on sod, manured and plowed in the spring, about five inches deep. In the fall, after the crop comes off, cross-plow some two or three inches deeper than plowed in the spring, that the action of the frost may pulverize a portion of the subsoil.

Second year, oats or barley, or both, with three parts of clover seed to one of timothy.

Third and fourth years, mow and pasture.

Fifth year, green fallow with peas or beans, followed by wheat with timothy and clover, half and half, —to remain in grass three years; then commence another round with manure and corn, as before.

Although my land is pretty good for wheat, I prefer a mixed plan of farming, to any particular branch exclusively." .....

MORGAN HORSES.—The following extract from a letter lately received from Mr. BENJAMIN THURSTON, of Lowell, Mass., is deserving attention. Mr. T. has had great opportunities for observation in regard to horses.

"Twenty-two years since, I bought several of the old (first) Morgan's colts. They were raised by Mr. Goss, of Vermont, who was at one time the owner of the old horse. I found they showed traces of better blood—their action was finer, they moved more easily and gracefully, and could endure more than most of those I have had since. They had a bony head, with sharp ears, and were close, but *pointed* horses. The difference between the former and many of the present Morgans, I attribute to the French blood in some of our mares, from which the latter have come. I have noticed that *Black Hawk's* progeny, when there has been French blood in the dam, have not quite that simplicity of action which those have whose dams have better blood. Some of those partaking of the French or Canadian blood, have, as I think, a little too much action—or rather a *labored* motion, which is apt to make them leg-weary in a long day's drive."

.....

BREEDING ANIMALS.—JOSHUA R. LAWTON, Esq., in his late address before the Berkshire County Ag. Society, observes:—"What a wonderful triumph of human reason and power, that the animals given and subjected to man by the great Author of Agriculture, can be moulded and fashioned to his liking, as the clay is fashioned by the potter! Form and figure, size and power of bone and muscle; adaptedness to the peculiar service required; kindness and docility of disposition, and even agreeable countenance and expression, by patient and skilful breeding, can be successfully attained."

In relation to the same subject, Mr. S. B. COLBY, in his address published by the Washington County (Vt.) Society, says:—"It has been, and perhaps still is, the belief of many, that *care* and *keeping*, are the true sources of improvement in stock. That the qualities of the animal are determined more by the food that supplies the stomach, than the blood that flows in the veins. That keeping, care, and climate, influence the individual is true, and in the course of centuries, characterize the species; but it would be weak policy to decline the use of standard specimens of animals, which by selecting the good and rejecting the bad, for a long time, are now offered to your service, already finished to a high degree of perfection. Who can hope to transform our native cattle into Durham, Devon, Ayrshire, with their perfection of form, deep chest, straight limb, and majestic proportion, with the mere instrumentality of turneps and clover? And who expects to create the peculiar compact shape, comeliness and strength of the Morgan Horse, by even the most bountiful allowance of *hay and grain?* As well by diet and education may the 'Ethiopian change his skin, or the leopard his spots.'"

INFLUENCE OF RAILROADS.—Hon. J. M. NILES in his late address before the New Haven County Agricultural Society, makes the following judicious remarks in relation to the influence of railroads:

"It has been supposed by many, that the system of railroads and canals, by bringing the products of the West into competition with those of the Atlantic States, would operate injuriously to the agricultural interests of the latter, and reduce the value of land. But on a full development of that system, the result will be otherwise. Were agriculture and commerce the only great interests of our country, this consequence might have followed. But manufactures, the other great interest, supply local markets for the farmer; and the railroad system is already exerting a powerful influence in establishing manufactures in the interior, at points remote from tide water; and thus creating local markets for those products of the farm which would not justify transportation to our commercial cities on the seaboard. Whilst railroads bring the great staples of the West into competition with those of the Atlantic States, they enable the latter to send to market at a good profit, a great variety of products, which could not otherwise be done, and which will not bear transporting from the western states. And this system, by its influence in evolving the various resources of the country, and increasing its wealth, exerts a favorable influence on agriculture generally, and more especially on sections contiguous to our commercial towns and manufacturing districts. Whilst it brings the flour and provisions of the West into the market on the seaboard, it enables the farmers in the Atlantic States to avail themselves of the markets, where local ones do not exist, for hay, milk, vegetables, fruit, and various articles, which, were it not for those facilities, would bear transportation a few miles only."

ANSWERS TO INQUIRIES.

RED CEDAR.—"SUBSCRIBER," Ontario county, N. Y. We are not in possession of any information in regard to the cultivation of this plant for hedges, essentially different from what is given in our May number, p. 164.

SPIKED ROLLER.—H. A. W., Providence, R. I. This implement is sometimes used on sward-bound grass-grounds, but we do not know where it is made for sale. A harrow with thin, sharp teeth, answers as good a purpose as the roller.

BREED OF HOGS FOR EARLY FATTENING.—H. A. W. The Suffolk is unquestionably a good breed of hogs to kill young. They would give good weight at six months old. (See Cultivator for March last, p. 94, 95.) A cross of the Berkshire and grass breeds would do well.

BREED OF HENS FOR LAYING.—The *top-knot* varieties, known as Polands, silver and golden top-knots, &c., are good for laying. We should prefer these, or a cross of them and the game fowl, for eggs, merely.

AGRICULTURAL PAPERS AT PHILADELPHIA.—"A SUBSCRIBER," Brooklyn, L. I. The only agricultural paper published at Philadelphia, so far as we know, is the *Farmer's Cabinet*, a monthly octavo, of 32 pages, published by JOSIAH TATUM, North Fourth-street, at one dollar a year.

PRESERVING EGGS.—R. G., Connecticut. We have no more than what we have published on this subject, except the following: H. A. PITTS, of Winthrop, states in the *Maine Farmer*, that he has tried many methods of packing eggs, and that the best mode is to put them in charcoal. The charcoal is pounded and the eggs packed in it in the same way that it is usual to pack them in salt. They keep perfectly good, and when used after several months, were not to be distinguished from those just layed.

STORING SWEET POTATOES.—In answer to a correspondent who requests information in regard to the keeping of sweet potatoes through the winter. we give from Norman's Southern Ag. Almanac, the following:

"The sweet potato should not be gathered till there has been frost sufficient to kill the vines. We have always hitherto stored in *pumps* or *cocks*, and have had abundance of fine yams until mid-summer. Whilst the potatoes are being gathered, two or three trusty old hands are engaged in preparing the pumps, hauling a quantity of dry crab-grass, previously gathered, and of dry corn-stalks. A piece of high dry ground, under good fence, is necessary. A circular bed is formed, six or seven feet in diameter, by drawing the earth from the middle all around, making a saucer-like bed. In the centre of this, a small triangular chimney, made by nailing together three pickets, six or seven feet long and as many inches wide, is set on end, and the potatoes are carefully emptied round it from the baskets, being careful not to bruise them, and to leave a foot in length of the chimney protruding above. A sprinkle of fine, dry straw or crab-grass hay on the bottom, is necessary. Build the potatoes up as high as possible, so as to form a steep-sided cone. Over this, put a thin covering of dry crab-grass; then cover with cornstalks, carefully laid on, with their butts on the ground, to the thickness of five or six courses. The whole must then be covered with earth; at first, a light covering, to be increased by another coat when cold weather sets in; smoothing off each time by patting with the spade. The earth to cover with, is taken from around the pump, forming a ditch, with an outlet from which the water drains. The warm, damp air generated by the sweating of the roots, escapes through the chimney, which may be closed with a wisp of straw, if the weather sets in very cold. A slight roof of clapboards should be placed over each pump, not resting upon them."

PREPARATION OF MANURE.—O. O., Haddam, Ct. If the fermentaion of manure takes place in such circumstances that the valuable portions are not thrown off and wasted, we have no doubt that it is an advantage. At any rate, its action is rendered more immediate and effective. It may have been on this account that effect of the manure in the first case cited by you, was so conspicuous.

ELLSWORTH'S SYPHON RAM.—F. R., Milwaukie. We hope to be able to answer your inquiry shortly.

STALLS FOR CATTLE.—R. D. H., Nelson, N. Y. We would refer you to the June number of our current volume. Feeding boxes to stand in yards, for feeding coarse fodder and straw, may be made by fastening planks five or six feet long, to four upright joists or posts, so as to form a square box, three feet high. A bar eighteen to twenty inches above the planks, will serve to keep the fodder from being thrown out by the cattle tossing their heads.

DISEASE IN SWINE.—J. A. F., Newport, N. Y. We think it probable that the disease which has attacked your swine is the *mange*. The malady is identical with the *scab* in sheep, and the *itch* in man. Mr. YOUATT, in his work on swine, lately published, says, "Where the mange is recent, a tolerably strong decoction of tobacco, or digitalis, will often prove an efficacious wash for the diseased parts, or a solution of corrosive sublimate; but if the eruption is of long standing, and has degenerated into scabs, a solution of arsenic, in the proportion of one ounce to a gallon of water, or, what is still better, sulphur and mercurial ointment in the proportion of an ounce of the former to a drachm of the latter, carefully and thoroughly rubbed into the skin, must be resorted to."

RAISING FOREST TREES.—J. W. C., Springfield, Mass. The walnut and chestnut must be planted as soon as they are out of the hull, or kept in moist earth till it is convenient to plant them. The "seed of the oak" (acorns) may be kept for some time in a damp situation, but should not be allowed to shrink much before being planted. The white oak is the most valuable of this family, and of the hickories, the soft-shelled or "shag-bark," is best. The white pine is readily raised from seed. There are many plantations in the eastern part of Massachusetts, produced in this way. The seed must be gathered as soon as the cones drop, or the cones should be gathered and placed under cover till the seeds will drop out. If they open in the woods, squirrels, mice, and birds often get the seeds. The seeds should be put in the ground as soon as practicable after they are obtained.

LOCUST FOR TIMBER.—E. Q., Salubria, N. Y. The species of acacia, which is preferred for timber, is the yellow locust as commonly called. It is best adapted to light or loamy soils. The seed may be obtained of most seedsmen. They may be sown in spring in beds, as beets or other vegetables are sown. They may be transplanted from the seed-bed when a year old, and placed in rows as apple-trees are in nurseries; and when they attain to a proper size, which will be in two or three years, may be planted permanently. They require to be placed in hot water before being planted, in order to soften the hard covering with which they are enveloped, and insure their immediate germination. Pour the water on the seeds, and let them remain till the water is cool.

MONTHLY NOTICES—TO CORRESPONDENTS, &c.

Communications have been received during the past month from F. R., J. M. Crook, B., P., J. A. F., E. Hammond, D. T., Observer, A Subscriber, J. W. Russell, Robt. Chisolm, John Barber Burnett, F. Holbrook, E. Quin, H. W. S. Cleveland, Reader.

Books, Pamphlets, &c., have been received as follows:—*New England Ag. and Hort. Almanac*, for 1848, by F. Trowbridge, New Haven, Ct.——*Address of* T. F. Bowie, Esq., before the Prince George's Co. (Md.) Ag. Society, Oct. 15, 1847.——*Ewbank's Hydraulics and Mechanics*, Part I, from the Publishers, Greely & M'Elrath, Tribune office, New-York.——*Address of Rev.* F. J. Goodwin, at the Cattle Show of the Middlesex Co. (Ct.) Ag. Society, and the Reports of the awarding committees, from Wm. Makinster, Esq.——*Address of* Harman C. Westervelt, at the Plowing Match of the American Institute.

The Cultivator for Agricultural Societies.—Nearly a thousand copies of "The Cultivator," have this year been distributed by Agricultural Societies—in part as premiums, and in part to members of said Societies. The Rhode Island Society for the Promotion of Agriculture, the Chittenden and Caledonia Co. (Vt.) Ag. Societies, the Hartford Co. (Ct.) Ag. Society, and the Dutchess Co. Society in this State, each supply their members with an agricultural paper. A large number of other Societies distribute the annual volume of "The Cultivator" as Premiums; and we would suggest to managers of Agricultural Societies generally, whether they might not materially advance the objects they have in view, by distributing either the bound volume or the numbers as issued monthly of "The Cultivator," as Premiums. The bound vols. will be furnished to Ag. Societies at 92 cts. each, and the monthly numbers at 67 cts. per year.

Prepared Guano.—We have received a circular in relation to an article under this name, offered for sale at S. F. Halsey's Steam Mills, 62 Vesey street, New-York. We have no knowledge of the article except what is to be derived from the paper above alluded to. We can only state, therefore, that the "prepared guano" is offered at one cent per pound, and that it is asserted that the preparation is such as to prevent the loss of the ammonia, which in the common guano is sometimes wasted without benefitting the crop to which it is applied.

Mr. Taintor's Imported Merinos.—We had lately an opportunity of seeing the Merino sheep imported in 1846, by John A. Taintor, Esq., of Hartford, Ct. In procuring these sheep, Mr. T. spared neither pains nor money. He personally examined the most noted flocks of France and Spain, and made his own selections, whatever were the prices demanded. His principle object was to procure such sheep as were calculated to produce the largest quantity of wool of a medium quality, this being in his opinion the class of sheep from which the most money could be realized by farmers in general in this country.

On looking at these animals, we were first struck with their extraordinary size, they being much larger than any sheep of the Spanish race that we have before met with. Some of the ewes weigh about 200 pounds each. The symmetry, too, of some of them is quite remarkable—their straightness and breadth of back, and fullness of chest, almost equalling the best English breeds. Their wool is uncommonly close, and every part of the body is thickly covered. They were not washed at the last shearing, but their fleeces as taken off, averaged 16 pounds each—of one year's growth. There is but little difference in the size or weight of the full-grown sheep; but in respect to shape and evenness of fleece, there appears to be some variation. For ourselves, we should decidedly choose those of round forms and smooth skins, in preference to those with large dewlaps, ruffles, and wrinkles; being confident that the superior quality of the fleece of the former would more than balance in value any deficiency in its weight.

Mr. Taintor has yet no ewes for sale. He meets with a ready sale for all his ram lambs at satisfactory prices. If judiciously used, their blood will be a valuable acquisition to the flocks of this country.

Shaker Barn at Hancock, Mass.—The Society of United Brethren, or "Shakers," at Hancock, Mass., have a large circular stone barn, which is justly regarded as a curiosity. In company with Wm. Bacon, Esq., of Richmond, we lately made a call at the Hancock village, and took a short look at this barn. It was built in 1826, is 300 feet in circumference, and 90 feet in diameter on the inside. The walls are of stone, 28 feet in height. The entrance for loads is on the second story. The bay is in the centre. The teams on entering pass along an avenue between the bay and the wall—the loads are discharged, and the teams go out at the same place they went in. Twenty-five loads or wagons can be taken in at one time. The bay will hold 400 tons of hay. The stalls for cattle and horses are on the first floor, and are arranged in a circle corresponding to the shape of the building. The animals stand with their heads towards the centre of the barn, and are handily fed from the bay. There are stalls for 75 head of cattle. The barn is substantial and convenient, but not quite as convenient, we think, as the Shaker barn at New Lebanon, described in the Cultivator for 1846, page 305.

Devon Bull Calf for North Carolina.—We are informed that J. H. Snow, Esq., of Raleigh, N. C., purchased a fine Devon bull calf of Mr. Washbon, at the late State Fair, at Saratoga. We should have noticed the purchase in our October number, had it come to our knowledge.

Fair at Hartford, Ct.—We mentioned last month that the arrangements for the in-door part of the late show and fair at Hartford, were planned and executed with much judgment and good taste. We cannot forego the opportunity to mention one object in particular, which besides being very beautiful in itself, gave great effect to the general display, and was much admired by the thousands in attendance. It was a miniature cottage and garden. The cottage was in the Gothic style, perfect in design. Its roof and sides were covered with green moss. It stood in the centre of the garden, through which a neat avenue led to the entrance. The garden was laid out in such a manner as to represent a fruit and flower garden of the most complete kind. It had its regular divisions, each devoted to the culture of its appropriate article. It had its winding walks, shady arbors, and rustic seats, and more than all its *fountain*, from the centre of which a pretty little jet was constantly playing. From the midst of the shrubbery and flowers, was heard the merry singing of birds, rendering the whole a charming scene.

The Barberry Bush.—From an article translated from the French in the *Horticulturist*, it appears that

a man had a field of grain surrounded by a hedge of barberry nearly 600 feet in length, and that the grain of this field was never affected by mildew during the fourteen years the hedge remained. It is also stated that in the Royal School of Alfort, several experiments were made in 1815 and 1816, the results of which were to place beyond a doubt the impossibility of the injurious influence of this shrub.

INDIANA FARMER.—The Rev. HENRY W. BEECHER, the editor of this work, having received a call to the pastorship of "the Plymouth Church," in Brooklyn, has removed from Indianapolis to that city. Mr. B. has done much during his residence in Indiana to excite a taste for horticultural pursuits, and to advance the rural interests of that section, and we hope his removal to the city, will not cause him to abate his interest in these matters.

HARTFORD REPOSITORY OF ARTS.—The Hartford County (Ct.) Agricultural Society have established a REPOSITORY OF ARTS. Its design, as expressed in the circular issued by the society, is—"To open a store-house, wherein models, drawings, designs, specimens and descriptions of every improvement in Agriculture, in Manufactures, in Mechanism, in the Arts, in short in anything and everything which finds a name and place of utility among us, may be exhibited for the benefit of all."

The directors of the institution solicit contributions of all articles of usefulness, to be deposited in the place which has been provided for that purpose. They will be received and exhibited free of charge to the owner. "To each article, in some conspicuous place, will be attached the card of the inventor or proprietor, showing the place or places of its manufacture, agency and sale,—and accompanied with such detailed description and explanation of its use and merits, as the owner shall deem necessary to their full understanding."

While attening the Fair at Hartford, in October, we made a hasty call at this Repository, and from all we saw, are induced to think very highly of its utility. A spacious apartment has been fitted up for the reception of articles, and a collection, quite large, considering the little time that has elapsed since the institution was established, has been made. It is under the charge of LORENZO BULL, Esq., to whom applications for depositing articles, should be made. We commend the Repository to the favorable attention of the public.

ELEGANT FABRIC.—A silk bed-quilt was presented at the Hartford Fair, by Miss SMITH, which was composed of 7,780 pieces. The pieces were set in what is called the block form, and so perfectly was the work executed, that the article had the appearance, at a little distance, of a collection of blocks of various colors, beautifully arranged, each standing out in full perspective. It was entirely the work of the young lady who offered it, and had occupied her youthful hours for the space of *nine years*.

AGRICULTURAL EXHIBITION AT FREDERICKTON, N. B.—J. H. REID, Esq., gives a brief account of the show of the Provincial Agricultural Society of New Brunswick, which took place on the 5th of October. Mr. R. says:—"The horses were not a good specimen of stock, as the premiums were confined to three-year old colts. The pigs were all of the Berkshire and Sussex breeds, and were most beautiful. The vegetables were fine—no country could beat our potatoes, carrots, mangel wurtzel, and turneps. The handiwork of our women was good, and showed industry. Butter cheese, cloth, &c., were all good."

BIG CABBAGE.—We have received from Mr. HENRY TOLHURST, Troy, a cabbage weighing 22½ lbs. We are told that it is as remarkable for its fine quality as for its large size.

THE IOWA FARMER'S ADVOCATE, edited by H. GATES, and published at Burlington, by James Tizzard & Co, monthly, at $1 a year. We are glad to see agricultural journals springing up in our new settlements. They cannot fail to exert a highly beneficial influence. The Prairie Farmer at Chicago, is one of the very best of our farmer's papers; and every number shows, by the number of its contributors, the hold it already has upon the affections of the west. We hope to see our Iowa friend, ere long, giving similar evidence of the determination of the farmers of that new state to support a paper of their own.

FAT MUTTON.—We are informed that Mr. WYNANT YOUNGHANS, of Sandlake, lately slaughtered a 3 year-old ewe, a cross of the Cotswold and Bakewell breeds, the carcass of which weighed 115 lbs., and was sold to Mr. WILLARD, proprietor of the Troy Female Seminary, for 8 cents per pound. The pelt weighed 21 lbs., and sold for $1.75; the rough tallow sold for $1.05, making the nett proceeds of the sheep $12. We have seen Mr. YOUNGHAN's sheep at the Troy shows—they are good.

VERMONT AGRICULTURAL AND HORTICULTURAL SOCIETY.—We are pleased to learn that a society with this title was organized at Montpelier, on the 28th of October last. Its officers are Charles Paine, of Northfield, *President;* Leonard Sargent, of Bennington Co., George T. Hodges, of Rutland, William Nash, of Addison, L. G. Bingham, of Chittenden, B. B. Newton, of Franklin, Samuel Adams, of Grand Isle, Ariel Hunton, of Lamoille, Wm. J. Hastings, of Orleans, Daniel Baldwin, of Washington, E. B. Chase of Caledonia, Reuben C. Benton, of Essex, A. B. W. Tenney, of Orange. John Porter, of Windsor, Frederick Holbrook, of Windham, *Vice-Presidents;* E. C. Tracy, of Windsor, *Rec. Secretacy;* C. Goodrich, of Burlington, *Cor. Secretary;* Geo. W. Scott, of Montpelier, *Treasurer;* E. P. Jewett, of Montpelier, *Auditor;* Harry Bradley, Burlington, Francis Wilson, Hinesburgh, Geo. W. Collamer, Barre, J. W. Howes, Montpelier, *Executive Committee;* C. Goodrich, Burlington, S. R. Hall, Shaftsbury, David Reed, Colchester, *Publishing Com.*

The people of Vermont are among the most enterprising in the country, and the organization of this society is but another evidence of their determination to improve the valuable resources of their state.

THE PAST SEASON IN OHIO.—ISAAC DILLON, Esq., Zanesville, Ohio, writes—"The wheat crop in Muskingum county, was not over half an average crop. The season has been very favorable for Indian corn and oats, and we have the largest and most uniformly good crops of those grains ever raised in Ohio. The potato disease is prevailing everywhere, so far as I have seen or heard. A neighbor of mine who expected to have two thousand bushels, will not gather one hundred. My own crop is so diseased that it is not worth digging."

SEEDLING APPLE.—A. R. MCCORD, Esq., of Lagrange, Dutchess county, has left with us a specimen of a seedling apple which we think entitled to notice. It is of medium size, good form, (nearly round,) and of a beautifully striped red color. It ripens in November, and will keep till January. Its taste is pleasant, but not as high flavored as some.

PROTECTION OF HICKORY WOOD FROM WORMS.—In our last, we stated that a correspondent of the *Prairie Farmer* had recommended the cutting of hickory the last of July or first of August. At the exhibition of the Hartford county Ag. Society, (Ct.) we saw what was deemed a demonstration of the correctness of this theory. Specimens of hickory wood, cut in August, were shown, which were perfectly sound, and had not been touched by worms; while samples which were cut

the same year in the winter and spring months, were so badly eaten by worms as to be worthless for timber.

MULTICOLE RYE.—REUBEN WHEELER, of Ferrisburgh, states in the *Vergennes Vermonter*, that he obtained some multicole rye, which he sowed the first season about the middle of May in drills; he mowed it twice that summer, and the next year it yielded a good crop. In September, the second year, he sowed a larger piece of ground with it—pastured it with sheep till winter; the next season measured what grew on ten rods of the piece, and found it at the rate of *sixty-four bushels and one peck* per acre. The land had no manure. He says he has found this kind of rye better for bread than common rye—being white and less rank. He states that he has counted from 70 to 120 straws from one grain, all producing large heads.

A FEMALE FARMER.—The second premium for the best cultivated farm in Litchfield co., Ct., was awarded the past season to Mrs. VESTA HAWKINS, of Watertown. The farm contains 160 acres. It has been under Mrs. H.'s management for the last ten years. The committee of examination say:—"It is divided the present season into twenty-two acres of meadow, three and a half of corn, six of oats, one and a half of rye, two of buckwheat, a half acre of potatoes, seven acres of woodland, and the residue of pasture land. The produce of the farm for the present season is estimated as follows: fifty tons of hay, two hundred bushels of corn, one hundred and thirty-three shocks of oats, and one hundred and fifty bushels of potatoes. The stock kept on it this season consists of twenty-six head, including six calves raised this season, two horses and fifty-six sheep. This farm is conveniently laid out into small fields, the fences mostly of rails, all in good repair, and together with the buildings, presents a neat and tidy appearance."

TIMOTHY AFTER BARLEY.—A correspondent of the Genesee Farmer sowed timothy seed with spring wheat and with barley—both alike, with the same quality of seed. A fine growth of timothy, unmixed with other grass, followed the barley; while after the wheat it was mixed with small clover and red-top. The crop of grass on the former was good—on the latter, poor—the treatment being precisely alike. Hence it is inferred that barley is less exhausting for timothy, and better adapted to precede it in a good rotation.

SALE OF LONG-WOOLED SHEEP.—We understand that Mr. CLAYTON B. REYBOLD, sold at his farm, near Delaware City, Del., on the first of September last, a lot of his superior Long-Wooled rams, at the following prices:—No. 1, $61—Maj. PETER, Montgomery county, Md.; No. 2, $44—Mr. CARROLL, Baltimore; No. 3, $40—Mr. GRAY, Philadelphia; No. 4, $43, and No. 5, $100—Mr. Griscom, New-Jersey; No. 6, $10—Mr. HICKMAN, Pa.; No. 7, $43, and No. 8, $41—Mr. BOLLING, Va.; No. 9, $45—Mr. BROWN, Md.; No. 10, $41—Mr. JESSUP, Baltimore; No. 11, $40—Mr. PEYTON, Tenn.; and No. 12, $40, Mr. HALL, Sussex, Del. Eight ewes sold as follows:—No. 1, two ewes, $28 per head—Mr. HOLT, N. C.; No. 2, two ewes, $14 per head—Maj. PETER, Md.; No. 3, two ewes, $13 per head—Maj. PETER, Md.; No. 4, two ewes, $11 per head—Mr. JESSUP, Baltimore.

A SPECIMEN OF INDUSTRY.—A correspondent of the Albany Atlas, says he became acquainted twelve years ago with a man who owned and occupied a fifty acre farm, kept in the best state of cultivation by his own labor. When asked how he managed to do so much, without ever appearing in a hurry, and never behind hand in his work, he said, "I always rise at 4 o'clock in the morning, summer and winter, and frequently get half through a day's work before my neighbors get fairly to work in the morning, and have plenty of time to read the Cultivator, and two or three newspapers." He now owns another and large farm, occupies both, and superintends the manufacture of over half a million bushels of salt yearly, in doing which he travels six miles every morning, and frequently gets to his office before his deputies; and has apparently as much leisure to read and converse as when he cultivated the small farm.

CHESS AND WHEAT ON THE SAME HEAD.—Much was said and published this season, of a head of wheat, found in Ohio, which had "seven perfect grains of chess growing out of it." M. B. Bateham, of the Ohio Cultivator, after some exertion, procured the identical head, when, on very close inspection, the chess spikelet was found to have *no connexion* with the wheat head, but was merely hooked in by its thread-like stem, between the chaff and the stem of the wheat head—probably caught there accidentally in harvesting. Some of the papers, in their eagerness for facts in favor of transmutation, have published the account of the wonderful head, on friend Bateham's authority, without any allusion to the *denouement!*

SUBSOILING—TALL CORN.—M. B. Bateham, of Columbus, Ohio, exhibited this autumn at the Columbus Horticultural fair, stalks of corn 14 feet high, grown on his own little farm—the soil clay, formerly a brick-yard, moderately manured, and SUBSOIL PLOWED.

SLOW PLOWING.—In Teschaids' Travels in Peru, it is stated that such a thing as a "regular plow" is not known in Chiloe. The plowing, such as it is, is done by Indians, who thrust sharp poles into the ground, and then by pressing upon them, as on levers, break up the surface.

WESTERN COMMERCE.—In the commerce of the Mississippi valley there are 1,200 steamboats; the annual expense of running them, 32 millions dollars; persons employed on them, 40,000. The annual commerce of the Mississippi valley is estimated at 430 millions of dollars. How important is the dissemination of agricultural knowledge, that the business, for which all this great machinery is but the servant, may be conducted to as much profit and advantage as possible.

DOCKING LAMBS.—Never hold the lamb by the tail, as is often done, while the operation is performed. For the skin being drawn back, when it recovers its natural place, leaves the bony stump bare. But push the skin towards the rump, and returning it will cover the wound.

AMERICAN ENTERPRIZE.—The first electric telegraph was, we believe, made in England; but only a few miles there are yet in operation; while nearly 2,000 miles are now in use in the United States.

AN INQUIRY.—Which is the most important to the substantial welfare of our country, War, or Agriculture? What are the annual appropriations by government to our military schools, to the army, and the navy? How many millions? What also are the annual appropriations by government to our agricultural schools and to agriculture? What proportion does the one bear to the other?

VALUATION OF LAND IN MARYLAND.—From the report of the committee of Ways and Means to the Maryland Legislature, giving the average valuation of the land per acre in most of the counties, it appears that the lowest is $4.88, and the highest $29.14—with various intermediate valuations.

MAPLE SUGAR IN VERMONT.—Mr. R. RICHARDSON, in his late address before the Washington County, (Vt.) Ag. Society, states that in 1840, the quantity of maple sugar made in Vermont, was 4,647,934 pounds, —equal to about 16 pounds to each man, woman, and child.

THE ARCHITECT, a series of Original Designs for Domestic and Ornamental Cottages, connected with Landscape Gardening, adapted to the United States. Illustrated by Drawings of Ground Plots, Plans, Perspective views, Elevations, Sections, and Details. By WILLIAM RANLETT, Architect: Published by W. H. GRAHAM, New-York.

This highly respectable work is issued in numbers, each number containing two or more plans of buildings, with perspective views, ground plans, interior details, and complete specifications and estimates. The work, as we are informed, has been projected to supply a systematic treatise on Rural Architecture, with scientific and practical developments of various styles adapted to the United States. It is to be comprised in two volumes, the first of which, consisting of ten numbers, is completed, and contains twenty-one original designs of rural residences, cottages and villas, exemplifying twelve different styles of architecture—the erections varying in cost from nine hundred to twelve thousand dollars. The work also contains sketches of different styles, essays on ventillation, the appropriation of light, heat, water, and other subjects connected with building. It is intended that the whole work shall constitute a "scientific and practical guide for the erection of country and suburban dwellings of all grades, from plain cottages to elaborate and ornamented villas in the most approved styles of rural architecture; also for laying out and improving the grounds connected with them." We deem the work especially deserving the patronage of all who are interested in the subjects to which it is devoted.

EMIGRATION.—Rev. Mr. GOODWIN, in his address before the Middlesex County (Ct.) Ag. Society, discusses the subject of emigration. He thinks "there is no necessity, as many would suppose, of emigrating to the fertile regions of the West. We love to hear," he continues, "of the fruitful soil of that region, and from our inmost hearts we thank God that such a goodly land is given us; but with all that may be said in favor of those rich and fertile prairies, we love more than these, the hills and vallies of our own New England. True, the latter require more labor at your hands. Year by year they must be enriched by you, and that perhaps in no small measure; but when this is done they will certainly repay you. With less abundant crops, perhaps, than those in distant sections of our land, you are sure to realize a much more liberal price. You have here, moreover, the society that you love,—you have those around you whom you have known from childhood up, and whose characters you respect and value. You have, too, schools and churches established at your hands. Besides, we believe it is a mistaken idea, that so much is gained, in any respect, by those who, relinquishing their birth-places and their friends, secure in the thinly settled regions of the West, the possession of lands on terms which seem so low. There are various improvements to be made on those lands. These improvements demand no little additional sacrifice of time, labor, and capital. We believe, if this were all considered, it would be found that in this state, and various portions of New England, there could be farms obtained, with every improvement in the way of walls and buildings, as reasonable as, in the end, will prove the lands I have referred to."

MENTAL IMPROVEMENT OF FARMERS.—Professor MEACHAM, in his address before the Addison County (Vt.) Ag. Society, observes:—"In making provision for your family, you should provide something to *read*, as well as something to *eat*. You have little reason for congratulation in improving land and stock, if the mind about you is going to waste. Every farmer has more time in the year for gaining general knowledge than any professional man in the active pursuit of his profession. But it does not depend on time so much as on inclination. Webster says that 'even in matters of taste and literature, the advantages of a man of leisure are apt to be over rated. If there exists adequate means of education, and the love of learning be excited, that love will find the way to the object of desire through the crowd and pressure of the most busy society.'"

APPLE TREES BEARING IN EVEN AND ODD YEARS.—We mentioned in a late number of our paper, that Mr. COLE, of the *Boston Cultivator*, entertained the belief that apple trees produced more fruit in *even* than in *odd* years. As he has expressed a wish to have his views placed "in a proper light" before our readers, we make the following extract from his paper of the 13th of November:—

"In New England, generally, when the seasons are favorable, we have a large crop of apples in even years, and a small one in odd years. These remarks apply both to natural and grafted fruits, and to most parts of New England. We have noticed for thirty years, so far as our observation has extended, and so far as we have heard by reports, that orchards of natural fruits bear mostly in even years, and nearly all of our valuable kinds, such as Baldwin, Hubbardston Nonsuch, Rhode Island Greening, Danvers Winter Sweet, Porter, Jewett's Fine Red, and some others, bear mostly in even years. There may be exceptions in single trees, and even whole orchards and neighborhoods, still the general principle, as we have stated, is correct. As to other parts of the country, besides New England, we have made no remark, but we think that in the middle and western parts of New-York, there is generally as large a crop of apples, if not larger, in odd years; for when we have a scarcity here in odd years, there is a large supply from that state."

YIELD OF POTATOES FOR 1847.—The committee of the Berkshire County (Mass.) Ag. Society, appointed to examine crops for the year 1847, state in reference to potatoes, that they believe one-fourth of the crop in the county was lost by the rot at the time of the examination—first of October—and that the disease was then progressing. The committee, however, awarded the following premiums: For the best acre of potatoes, the long-red, or Merino variety, estimated at 480 bushels, raised on swamp muck, lightly manured. For the second best acre, 380 bushels, Mercers. Third best acre, 380 bushels, June Pink-eyes.

GOOD MODE OF TRENCHING.—A "Suburban Grower" of strawberries, Boston, describes in the Horticulturist, the following excellent mode of deepening and enriching garden soil, which may be applied to other crops than strawberries:—Take off the soil one spade deep along the whole side of the piece to be trenched. Carry it in a wheelbarrow and empty it on the opposite side of the plat, where the trenching is to end. Then cover the earth in the bottom of this trench with a heavy coat of manure, and dig it under at once. Then dig another such trench by throwing the top soil on the soil just manured and dug. Pursue this course till the whole is finished.

This doubles the depth of the soil, and enriches it, and does not deteriorate the quality of the surface by the admixture of the subsoil, as in common trenching.

FINE OLD PEAR TREES.—According to S. G. PERKINS, in the *Horticulturist*, many trees planted by the French Huguenots, in the early part of the last century, are still standing. "There are a few solitary trees of the old fruits of a hundred years standing, and more left in yards, which continue to produce the finest St. Michaels [Doyennés,] St. Germains, Brown Beurrés, Virgalouse, Winter Colmars, &c., as fine as they did fifty or sixty years ago."

PRICES OF AGRICULTURAL PRODUCTS.

New-York, Nov. 15, 1847.

FLOUR—Genesee, per bbl. $6.18¾—Ohio and Michigan, $6

GRAIN.—Wheat, Genesee, per bu., $1.45—inferior southern, $1.06—Corn, northern, 72*a*73c.—Rye, 91c.—Oats, 53c.—Barley, 85*a*87c.

BUTTER—Orange County, per lb., 21*a*24c.—Western, dairy, 16*a*18 cents.

CHEESE—per lb., 6*a*7c.

BEEF—Mess, per bbl., $9*a*9.50.—Prime $6*a*6.50.

PORK—Mess, per bbl., $15—Prime, $9.87*a*$10.25.

HAMS—Smoked, per lb., 11*a*12cts.

LARD—Per lb. 10*a*12c.

HEMP—Russia clean, per ton, $220. Am., dew-rotted, $150.

HOPS—First sort, per lb., 7*a*8c.

COTTON—New Orleans and Alabama, per lb., 7*a*9½c.—Upland and Florida, 6¾*a*9c.

WOOL—(Boston prices,) Dec. 13.

Prime or Saxon fleeces, washed per lb.....	45*a*50	cts.
American full blood fleeces,.....	40*a*45	"
" three-fourths blood fleeces,.....	35*a*38	"
" half blood do	32*a*35	"
" one-fourth blood and common,.....	25*a*30	"

SUBSCRIPTION PRICES.—Single copies, DAILY, $5—SEMI-WEEKLY, $3—WEEKLY, $2. See terms to clubs below.

THE NEW-YORK TRIBUNE.

WE are on the eve of another Presidential Election. Let none fancy that since it is approached so calmly, it will be conducted sluggishly and terminated without excitement. Whoever cherishes such an illusion mistakes the character of the American People and the impulses which sway them. Equally idle is the imagination that party lines are to be effaced and broken down in this contest—that the prestige of some heroic achievement or the glitter of an epaulette is to chase from the popular mind all memory of the radical differences of sentiment which have so often arrayed one-half of our countrymen in fierce conflict with the other. Idle chimeras these! offspring of an empty heart or a sickly brain! With the progress of events a particular measure may become more or less important, the emphatic assertion of a certain principle more or less essential, but the question of questions remains and will remain. At one time, the establishment or maintenance of a Sound and Uniform Currency; at another, the upbuilding or cherishing new or feeble branches of Home Industry; at another the proper disposition of the Proceeds of the Public Lands; at a fourth, Peace or War, Spoliation or Justice; but underneath all these, mightier than any, more enduring than all, lives ever the elemental difference in which parties have their origin—on one side, the idea that Government should be Creative, Constructive, Beneficent; on the other, the negative, skeptical, do-nothing element, whose axioms are, "The best government is that which governs least," "The People are inclined to expect too much from Government," &c.,—which sees in a Canal, a Railroad, a Harbor, a Protective Duty only a means of enriching a few individuals at the expense of the community, and which cannot conceive how any can be benefitted by a public work without inflicting injury in at least equal measure upon others. The fundamental axioms of this negative philosophy are really hostile to Common Roads and Common Schools, required and sustained by law, as well as to those elements of national well-being against which it now directs the energies of a great party. The antagonism of sentiment growing out of these conflicting views of the nature of the true ends of Government cannot, in the nature of things, be lastingly compromised; it cannot be terminated by the result of any one election. It must be potentially felt in the party contests and popular agitations of many years to come.

On this and all the great questions growing out of it, THE TRIBUNE maintains emphatically the doctrines of the Whig Party. It advocates *Protection to Home Industry*, wherever such protection may be needed, and to the extent of the necessity; a *National Currency*, sound and of uniform value, composed of coin and paper in such proportions as public interest and general convenience shall dictate; *Internal Improvement*, by the General and State Governments, each in its own sphere, and by Associations, liberally incited thereto by such facilities as legislation may safely and justly afford; and such disposition of the *Public Land Proceeds* as shall secure the benefit thereof to the people of all the states throughout all future time. Above all, this paper will "study the things that make for peace," and strenuously oppose the fell spirit of war, the lust of conquest, and the passion for Military Glory, so mortally adverse to all those ideas of Social and Political Economy to which it is devoted, as a mildew to genuine Democracy, as utterly at variance with Christianity, and as a scandal to the Nineteenth Century. These views will be faithfully and fearlessly commended to public favor, while our opposition to the Extension of Human Slavery over one foot of soil where it has not now a legal existence shall be unsparing, uncompromising, and subject to no consideration of party advantage or Presidential triumph. Far sooner will we sink with our principles than succeed without them, however desirable success or however mortifying defeat.

THE TRIBUNE will endeavor to commend itself to all classes of readers by the fullness of its intelligence as well as the fairness of its discussions. With this intent one assistant editor will remain at Washington during the Session of Congress, giving daily reports of sayings and doings in the Houses and elsewhere; two European Correspondents will transmit us regular dispatches from the Old World; while no expense will be grudged in procuring the earliest and most reliable information from all parts of the world. Reviews of New Books of decided interest, and selections from the Popular Literature of America and Europe will be frequently given, with occasional reports of Public Lectures of high character; but it shall be our first object to present a fair and full picture of the *real* world, only varied at intervals by excursions into the realm of the ideal.

THE NEW-YORK TRIBUNE is issued Daily (a Morning and two Evening Editions, in order to serve each subscriber with the latest news possible) on a fair imperial sheet at Five Dollars per annum, or half the price of the great Commercial journals, by which it aims to be surpassed in nothing but Advertisements. A SEMI-WEEKLY EDITION is issued on a similar sheet each Wednesday and Saturday, and offered to subscribers at Three Dollars per annum or $5 for two copies. THE WEEKLY TRIBUNE is printed on a sheet of nearly double the size of the Daily, and afforded at Two Dollers per annum, Six copies for $10, Ten copies for $15, or Twenty for $24—payment being invariably required in advance. When the term paid for expires, the paper is uniformly stopped, so that no man need hesitate to take it from an apprehension that he will be persecuted by duns, or unable to get rid of the paper when tired of it. This rule has given offence to a few patrons of the non-paying order, but the great majority seem to like it better than the old fashion. It is not our custom to appoint Local Agents to solicit subscriptions, nor to place great reliance on Agents at all. But any person who is well enough known to be trusted by his neighbors may aid us if he will, and help himself if he chooses, by taking this Prospectus, and asking those who like The Tribune to hand him the money for a year, which he can remit at Club price, and thus obtain pay for his time and trouble. Subscriptions accompanied by payments are respectfully solicited by GREELEY & McELRATH,

154 Nassau-st., New-York.

☞ Notes of all specie-paying Banks in the United States are taken for subscriptions to this paper at par. Money inclosed in a letter to our address, and deposited in any Post Office in the United States, may be considered at our risk; but a description of the bills ought in all cases to be left with the Postmaster. G. & M.

CLUB PRICES.

SEMI-WEEKLY TRIBUNE.

Two Copies,.....	$ 5
Four,.....	10
Eight,.....	20

WEEKLY TRIBUNE.

Six Copies,.....	$ 10
Ten, ...	15
Twenty,.....	24

No paper continued after the expiration of the time subscribed and paid for. Dec. 1, 1847—1t.

SOUTH DOWN BUCKS.

THE subscriber offers for sale a few very superior South Down Bucks, some of which were selected by him in England. They are thought to be the best sheep of this breed in America, uniting as they do the blood of the celebrated flocks of the Duke of Richmond and Earls Jersey and Bathurst.

Application may be made by letter, addressed to Rhinebeck, N. York, or personally at the Ellerslie Farm, on the Hudson river, two miles south of Rhinebeck Landing. WILLIAM KELLY.

Ellerslie, Dec. 1, 1847.—1t.

TO WOOL-GROWERS AND BREEDERS OF FINE SHEEP.

REV. L. G. BINGHAM, of Williston, Vt., during the past summer has purchased and received from J. A. Taintor, Esq., of Hartford, Ct., eight of his imported Merino ewes, one buck lamb, and his very superior stock buck—the sire of the very superior buck lambs which have been sold out of his flock the past season. This buck was brought from France when a lamb—is one year old last January—was sheared 10th of August last year, soon after arriving—and was sheared same day of the month this year, having worn his fleece just one year—was clean-washed three days before shearing. His fleece weighed 14 lbs. His stock proves to be of rare excellence, and his lambs by the imported ewes have been sold at $100 to $200 each. Having often been applied to to put him to American Merino ewes, I have concluded to do so to a limited extent. The price will be $5 a head, to be paid on taking away the ewes. Applications must be made early. I have rented all the stock and land of Rev. L. G. Bingham, and all communications must be addressed to me at this place, Williston, Vt. The buck lamb herein mentioned, is for sale. He is from one of the best imported ewes, and will make a splendid sheep. The next crop of buck lambs will also be for sale. First come first served. When it is considered that all the buck lambs from this buck have been sold for $100 and upwards, the price charged for the use of him must be regarded as very reasonable. BENJ. F. BINGHAM.

Williston, Vt., Dec. 1, 1847.

HAY AND STRAW CUTTERS.

A LARGE supply of Stevens', Hovey's, and Towers' Cylinder Hay and Straw Cutters, constantly on hand at manufacturers' prices, at the Albany Agricultural Warehouse. When farmers learn the benefits to be derived from using cut feed, they will not be without a good machine. Mr. A. Burlingame, of South Trenton, N. Y., used one the past season, and the value he places upon its use is found in the following extract from a communication from him:—

"With less hay to begin the winter, and 30 cows and 4 horses (in all 100 head) more than the year before, he saved over from five to seven tons of good hay, while the year before he was entirely out before grass came." The greatest saving is in using up all parts and kinds of feed, instead of running to waste. For sale at the Albany Ag. Warehouse, Nos. 10 and 12 Green-st.,

L. TUCKER.

LIST OF AGENTS

FOR

"THE CULTIVATOR" AND "THE HORTICULTURIST."

(*Continued from page* 358.)

NEW JERSEY.

Augusta, W. H. Roe
Burlington, H. W. S. Cleveland
Bloomsbury, Jas. Bird
Belleville, D. Van Winkle
Bridgeton, J. B. Potter
Cinaminsin, N. N' Stokes
Camptown, John Mayell
Camden, B. W. Cooper
Chew's Landing, R. V. M. Cooper
Chester, James Haines
Columbus, J. W. Wright
Carpenter's Landing, W. V. Webster
Crosswicks, P. S. Bunting
Danville, N. Vliet
Elizabethtown, A. M. Moulford
Fairton, E. Glasley
Freehold, Joseph Combs
Flemington, Jas. Callis
Griggstown, A. Van Doren
Greenwich. A. Sheppard
Gloucester Point, A. Miller
Harlingen, C.C. Hoagland, M. D.
Howell Works, A. Lafetra
Hightstown, E. Pullen
Hacketstown, H. Fleming
Jacksonville. Sam'l Fort
Kingwood, J. T. Risler
Lambertsville, P. A. Reading
Leedsville, J. C. Grover
Lebanon, J. Daws
Middletown, T. Roberts, jr.
Moorestown, C. Stokes
Mount Holley, James Langstaff
Mendham, J. I. Ballentine
Madison, W. I. Britton
Mansfield, J. Wandling
New Brunswick, J. Simpson
Newark, Gibson & Ritchie
Newton, John R. Pettit.
New Vernon, S. Lindley
Pottersville, S. Potter
Plainfield, W. W. Cornell
Perth Amboy, James Parker
Pemberton, A. Lippincott
Princeton, Jas. Carnahani
Patterson, J. Home
Quakertown, Theod. Probasco
Ringoes, D. B. Kirkpatrick
Rahway, J. Shaw
Roadstown, R. Fithian
Sergeantville, J. Smith
Sparta, G. T. Comings
Squankum, H. H. Wainright
Spotswood, J. D. Outcalt
Shrewsbury, E. H. Vanuxem
Six Mile Run, F. T. Schenck
Stillwater, W.A. & R. F. Shafer
Salem. J. Elwell
Trenton. J. S. Chambers
Tom's River, W. McKean
Townshury, A. Hoagland
Tinton Falls, Thos. Guest
Woodbridge, D. N. Demarest
Weston, Isaac Cornell
Westfield, C. Osborn

PENNSYLVANIA.

Alleghany City, John Cockran
Athens, Sam'l Ovenshire
Abington Centre, Jas. L. Wilber
Allentown, D. C. Freytag
Brockwayville, Dr. M. Clark
Butler, A. M. Evans
Bristol. Sam'l Hulme
Brownsville, J. L. Bowman
Blakeley, J. Callender
Beaver, D. Mimis
Brown's Mills, Charles Colfelt
Berwick, Rev. J. H. Young
Bedford, A. M Farquhar
Buffalo Run, B. Waddell
Bellefonte, F. R. Smith
Bucksville, J. Fackenthall
Bakerstown, C. Anderson
Bethany, E. W. Hamlin
Bentley's Mills, A. J. Bowman
Byberry, E. Croasdale
Cooperstown, D. Forbs
Conneautville, Chas. B Power
Coopersburg, Chas. Wittman
Chanceford, Jas. S. Fulton
Canaan, Geo. L. Griffing
Curwinsville, John Miles
Canonsburg, F. M. K. Wilson
Connellsville, Jos. Herbert
Cook, G. I. Stranahan
Cattawissa, W. I. Eyer
Colebrookdale, J. Schultz
Carlisle, Sam'l Myers
Carbondale, H. Hackley
Dundaff, Jas. McAllee
Downingtown, I. Price
Erie, Thos. Moorehead, jr.
Equinunk, W. Weston
East Smithfield, A. Hull
Easton, H. W. Crosby
Eldredville, G. Molyneaux
Edmboro, J. I. Compton
Fallston, Jas. Carothers
Fleetsville, Theron Finn
Forkestown, E. Fassett
Fairview, M. Barnett, jr.
Friendsville, C. Carmalt
Greensburg, D. Weltz
Grays Valley, N. H. Taylor
Gap, W. P. Kinzer
Holliday's Cove, J. Edgington
Harrisburg, R. Bryson
Harthgig, G. Siddall
Hamlinton, B. Hamlin
Hopewell Cotton Works, E. J. Dickey
Hartsville, T. S. Hanscom
Harrisville, John Hogg
Herriotsville, John Fawcett
Harewood, A. Main
Harbor Creek. C. Leet
Huntingdon, W. E. McMurtree
Leraysville, E. Marsh
Lahaska, W. Stavely
Lumberville, W. J. Jewell
Lawrenceville, W. Kilburn
London Grove, Jos. S. Swain
Lancaster, J. Gish
Lewistown, L. T. Watson
Little Meadows, L. Barton
Lewisburg, Wm. Murray
Mauch Chunk, Sam'l Lippincott
Muncey, B. M. Ellis
McConnellsburg, Dr. R. M. Denig
Maiden Creek, J. Wright
Meadville, M. H. Bagley
Morrisdale, S. Waring
Monroe, Jas. W. Long
Millardsville, O. T. Kinny
Martin's Creek, D. H. Snyder
Mansfield, John Waters
Montrose, C. J. Curtis
Mount Vernon, J. D. Ross
Mechanicsburg, Rev. Aug. Babb
New Derry, Alex. Thompson
Newportville, A. L. McIlvain
New Milford, J. P. Harding
Norristown, D H. Mulvany
Northville, N. Smith
Northeast, Jos. McCord
Newtown Square, L. Brooks
Newtown. A. Cornell
New Castle, Jas. Pearson
Newville, W. H. Woodburn
North Whitehall, E. Kohler
Oley, P. G. Bertolet, M. D.
Ottsville, R. C. Weaver
Oxford, E. Dickey
Paoli, John Groff
Pine Valley, E. Row
Pottstown, O. Stover
Pittsburg, M. P. Morse
Pleasant Valley, J. M. Sands
Pike, L. Hoag
Pineville, J B. Claxton
Pleasant Unity, Alex. Culbertson
Patterson's Mills, R. T. Johnson
Philadelphia, G. B. Zieber & Co.
Ryeson's Station, J. K. Loughridge
Rock Lick, John Bell
Rileysville, M. Tomlinson
Reedsville, Chas. Colfelt
Spring Creek, Steph. Eaton
Street's Run, J H. Neal
South Canaan, H. McMinn
Stroudsburg, F. Starbird
Setzler's Store, And. Bush, M.D.
Sharon, J. B. Curtis
Shepherdstown, D. Sheffer
Tarentum. L. Peterson
Tyler, J. Rogers
Thompsontown, Joseph Kurtz
Towanda, E. W. Hale
Tioga, B. Baldwin
Tidionte, Levi Bingham
Uniontown, A. Hadden
Upton, J. McClellan
West Alexander, J. D. Whitton
West Greenville, John Scott
Wellsboro, S. Emery
Williamsburg. B. Bell
West Mill Creek, Geo. Nicholson
Westchester, T. B. Beaumont
Warren, N. Sill
Wattsburg, John Yost
Wesleyville, S. Sewell
Waymart, S. V. Lee
Wyalusing, R. M. Welles
West Branch, Jas. C. Brown
Waynesburg, J. Higinbotham
West Beaver Dam, N.W. Filley
Waterford, H. H. Ray
Wilkesbarre, O. Collins
West Haverford, L. Morris
Yardleyville, Rev. C. Wiltberger
York, D. Small

DELAWARE.

Dover, W. W. Morris
Frederica, W. Dawson
Horsey's X Roads, Thos. Jacobs
Loveville, Steph. Springer
Newport, L. Justice
New Castle, J. Patterson
Seaford, Chas. Wright
Wilmington, Jas. L. Roach

MARYLAND.

Annapolis, Jas. Boyle
Brick Meeting House, P. M. Steele
Baltimore, Sam'l Sands
Burkettsville, J. Shindley
Belleville, S. Thompson
Big Mills, W. S. Jackson
Buckeyestown, B. A. Cunningham
Bakersville, A. Rench
Bladensburg, Chas. P. Colvert
Chestertown, B. Wethered
Cumberland, L. M. Lemmes
Cockeyesville, J. D. Mathews
Centreville, John Tilghman
Cambridge, M. T. Goldsborough
Darnestown, L. W. Candler
Dawsonville, Geo. W. Dawson
Darlington, S. T. Prigg
Davidsonville, W. F. Brand
Ellicott's Mills, Dr. W. Denny
Elkton, J. Randall, jr.
Emmittsburg, Dr. J. A. Short
Easton, M. Goldsborough
East New Market, J. H. Hudson
Franklin, Dr. R. Dorsey
Frederick, F. A. Rigney
Federalsburg, W. Corkrin
Golden, J. Webster
Harrisonville, H. Fite
Havre De Grace, J. Donohue
Hunting, W. Corkrin
Laurel, Col. H. Capron
Middletown, H. Herring
Mount Pleasant, E. Creager
New Windsor, Daniel Engell
Owing's Mills, D. Carlisle
Princess Ann, Sec'y Ag. Society
Port Tobacco, H. Mitchell
Port Deposite, A. Anderson
Petersville, Col. H. Dunlap
Pomonkey, L. Marbury
Pikesville, Capt. J. M. Wise
Queenstown, Chas. G. Tilghman
Reistertown, F. Anderson
Rockville, Geo. F. Worthington
Royal Oak, S. Oram
St. Michael's, S. Hambleton
Sandy Spring, E. Stabler
Sykesville, W. Day
Sharpstown, E. Burford
Taneytown, Alex. McAlister
Triadelphia, J. Harban
Trappe, M. Goldsborough
Towsontown, Dr. A. H. Tyson
Utica Mills, Wm. Todd
Wisesburg, C. E. Bernoudy
Williamsport, F. Macomas
Wye Mills, W. H. DeCourcey

DISTRICT OF COLUMBIA.

Georgetown, J. H. King
Washington, John F. Callan

VIRGINIA.

Amherst C. H., M. L. Harris
Ayletts, Ed. Hill
Ætna, John Cooks
Abingdon, W. F. Preston
Alexandria, Bell & Entwisle
Anandale, Wm. Garges
Black Rock, J. R Feagans
Bowman's Mills, J. C. Bowman
Buffalo Springs, Z. Drummond
Bethlehem X Roads, G. B. Cary
Bethany, Robt. Buchanan
Bradford, Capt. C. J. Showman
Bull Creek, A. R. Ralston
Bachelor's Home, Col. M. Preston
Brandonville, A. D. Hagan
Bridgewater, J. Dinkell, jr.
Buffalo Forge, W. Weaver
Broad Ford. Rev. C. Fulton
Clarksville, W. Harris
Coman's Well, E. Burroughs
Coal Mines, W. H. Johnson
Clear Branch, L. L. Waterman
Curdsville, J. W. A. Saunders
Chalk Level, John Coles
Charlemont, S. G Davis
Culpepper C. H., E. B Hill
Campbell C. H., E. C. Jordan
Christiansburgh, E. Phlegan
Charlestown, J. W. Ransom
Chucpatuck, J. Bunch
Charlottesville, R. W. N. Noland
Crab Bottom, E. R. Bogart
Cedarville, Pleasant Smith
Clifton Forge, W. W. Paxton
Draper's Valley, D. G. Shepard
Davis' Store, R. Davis
Dayton, H. Thomas
Dover Mills, R. Wood
Doe Hill, H. McCoy
Everettsville, B. H. Magruder
Fancy Hill, W. Weaver
Farrowsville, Dr. W. C. Stribling
Frenchton, J. McCoy
Franklin, W. McCoy
Fincastle, Jas. S. Walroud
Front Royal, Robt. M. Marshall
Frederick's Hall, M. L. Ruper
Fairfax C. H., Robt. Allison
Fairmont, R. Hall
Fishersville, J. Porterfield
Gilboa, H. Goodwin
Gaines X Roads, J. G. Lane
Greenville, S. F. Christian
Glade Spring, Pleasant Smith
Hampstead, John Parker
Hamilton, Dr. D. Janny
Haymarket, I. Smith
Harrisonburg, I. Hardesty
Hardin's Tavern, R. W. N. Noland
Huntsville, Isc. Moore, jr.
Hampton, J. B. Cary
Ingles Ferry, Edward Hammet
Jefferson, D. B. Steger

Jonesville, F. S. Miles
Kerneysville, Dr. R. Hoffman
Kingwood, J. C. McGrew
Kanawha Salines, Capt. A. L. Ruffner
King George C. H., D. Lewis
Liberty Mills, E. P. Barbour
Lexington, D. Edmonson
Loyds, B. G. Rennolds
Loretto, J. M. Garnett
Liberty, A. B. Nichols
Lunenburg C. H., Rev. Jas. C. Mitchell
Lynchburg, M. Davis, jr.
Lovingston, C. T. Estes
Langley, H. C. Taylor
Locust Dile, W. Major, jr.
Liberty Hall, James Crow
Mount Crawford, A. B. Irick
Mount Sidney, R. S. Harnsbarger
Mount Clinton, J. Warren
McGaheysville, J. Ammon
Milford Mills, J. Towles
Moorefield, M. W. Gamble
Middlebrook, J. T. Randolph
Marksville, H. C. Kite
Martinsburg, Robt. Campbell
Manchester, A. B. Bott
Millwood, J. E. Page
Matthew's C. H., W. Shultice
Mint Spring, J. Beard
Mount Zion, Geo. W. Clement
Marion, Capt. B. F. Davis
Norfolk, E. W. Herbert
Newbern, Thos. Wysor
Newmarket, W. S. Henkell
Natural Bridge, J. F. Greenlee
Old Point Comfort, W. McClain
Orange C. H., D Hume
Oak Hill, J. T. Smith
Oak Flatt, Col. W. Dyer
Poplar Hill, Capt. T. Shannon
Proctor's Creek, A. Phillips
Pedlar's Mills, W. B. Rucker
Pleasant Gap, Thos. W. Walton
Port Conway, J. F. Dickinson
Prospect Hill, S. S. Randall
Pattonsburg, Allbright, Sherrard & Co.
Port Republic, S. Harnsbarger
Pursel's Store, S. B. T. Caldwell
Rose Mills, Dan'l Warwick
Roseland, R. H. Anderson
Ruckmansville, S. Ruckman
Rose Hill, J. Dunn
Richmond, R. Hill, jr.
Ridgeville, James R. Heiskell
Stafford C. H., Maj. S. Brooke
Stoney Creek Warehouse, A. Alridge
Sheetz Mill, F. K. Sheetz
Seven Mile Ford, Preston & Hanson
Staunton, W. Kinney
Shepherdstown, J. Hoffman, jr.
Suffolk, K. Hill
Smithfield, W. H. Jordan
Snickersville, R. Chew
Thompsonville, Geo. Ficklin
Thoroughfare, Chas. Stover
Triadelphia, S. D. Farris
Tappahannock, Col. R. Rouzie
Tye River Warehouse, S. Reed
Tye River Mills, Paul Massie
Upperville, C. A. Powell
Variety Mills, Rob't Michael
West Union, J. S. DeBar
Williamsburg, S. S. Griffin
Wheeling, W. Gregg
Warrenton Springs, G.W. Bradford
Walling's Creek, F. C. Allen
Wilmington, S. Stillman
Wellsburgh, Sam'l Jacob
Weaversville, W. H. Page
Warrenton, A. S. Campbell
West Liberty, W. Faris
Waynesboro, M. Finley
Warren, R. Pollard
Washington, Robt. S. Bell
Winchester, H. F. Baker

NORTH CAROLINA.

Albemarle, H. J. Kronz
Asheboro, B. F. Hoover
Belford, G. Sills
Battleboro, V. R. Bodie
Big Swamp, D. Williamson
Beaufort, Edward Hill
Berea, Jas. A. Russell
Brinkleyville, W. H. Wills
Cedar Hill, S. W. Barnes
Carthage, Gen. Doud
Charlotte, Geo. Cross
Clover Garden, W. Morrow, jr.
Crowder's Creek, W. L. Wilson
Cottage Home, R. H. Morrison
Clemmonville, E. McIver
Cowper Hill, A. McLean
Davidson College, S. B.O.Wilson
Dockery's Store, Hon. A. Dockery
Elizabeth City, C. C. Green
Early Grove, W. P. Reinhardt
Enfield, Dr. C. Whitaker
Fallstown, John Young
Fair Grove, Chas. Mock
Fort Defiance, E. A. Jones
Fayetteville, Benj. Robertson
Forestville, Sam'l Wait
Franklinsville, Jas. Johnson
French's Mills, Jos. M. French
Greenville, W. May
Greensboro, Jas. Sloan
Huntsville, J. Jarratt
Hammond's Store, J. Burns
Hookerton, J. Hooker
Halifax, M. P. Purnell
Heathville, F. N. McWilliams
Hillsboro, W. J. Bingham
Henderson, J. D. Hawkins, jr.
Jersey Settlement, Rev. T. McDonald
Kirkland, E P. Burns
Long Creek, J. F. Robitrech
Lincolnton, C. C. Williams
Lexington, Dr. W. R. Holt
Limestone, J. K. Shuford
Murfreesboro, S. J. Wheeler
Milton, A. J. Walker
Moseley Hall, Jesse Lassiter
Moffitt's Mills, J. Pope
Mount Vernon, J. G. Fleming
Morganton, R. C. Pierson
Nashville, N. W. Boddie
Newbern, Geo. S. Attmore
Oxford, Col. L. Gillin
Pioneer Mills, J. C. Sosserman
Pittsboro, Rev. P. W. Doud
Roanoke, Jos. J. Pugh
Rolesville, S Jones
Raleigh, W. White
Rock Spring, T. D. Oldham
Richardson's Creek, Jas. A. McCollum
Ridgeway, W. J. Hawkins
Rocky Mount, W. S. Battle
Rockingham, S. W. Covington
Sandy Ridge, J. Huessey
Stantonsburg, Dr. Ward
Smithfield, Dr. A. F. Telfair
Salisbury, Benj. E. Julian
South Mills, W. Old
St. John, J. C. Powell
Topsail, J. D. Jones
Tarboro, Robt. Norfleet
Taylor's Bridge, P. Murphy
Walterboro, Dr. R. L. North
Williamsville, Alex. Williams
Weldon, W. H. Day
Wilmington, W. A. Wright
Wilkesboro, A. W. Finlay
Williamston, J. S. Yarrell
Watson's Bridge, W. Watson

SOUTH CAROLINA.

Anderson C. H., J. N. Whitner
Aiken, J. D. Legare
Bluffton, N. P. Crowell
Buckhead, B. P. Ravenal
Barnwell C. H., Jas. Patterson
Bennettsville, W. Covington
Beaufort, R. Bythewood
Bethel, J. L. M. Adams
Blackville, W. S. Reynolds
Charleston, J. B. Mulliken
Columbia, W. W Purse
Chestnut Grove, W. S. Gibbes
Chesterville, Dr. S. W. Moore
Damascus, Capt. Geo. A. Fike
Edgefield C. H., Dr. E. J. Mims
Earlville, O. P. Earle
Fort Mott, M. I. D. Rast
Greenville C. H., Dr. A. B.Crook
Gladden's Grove, C. Thorn
Halselville, John Estes
Indiantown, H. McCutcheon
Lotts, R. Ward
Laurens C. H., J. Garlington
Landsford, Col. W. F. Davie
Louisville, L. A. Berkham
Monticello, W. J Alston
Milton, J. L. Young
Mountain Shoals, Jas. Nesbit
Nation Ford, A. Whyte
Newberry C. H., R. Stewart
Pipe Creek, Dr. S. Smith
Pendleton, J. B. Litton
Plain, B. F. Stairley
Pomaria, Wm. Summer
Rocky Mount, G. B. Montgomery
Summerville, R. S. Bedon
Spring Rock, J. D. Crawford
Society Hill, W. H. Evans
Stoney Point, J. Stacey
Terryville, J. E. Calhoun
Winnsboro, S. P. Thomas

GEORGIA.

Augusta, C. E. Greenville
Alpine, L. M. Force
Athens, J. Crawford
Blakeley, J. W. Perry
Bethel, R. Hazlehurst
Birdsville, I. V. Jones
Cuthbert, R. C. Geiger
Columbus, L. Spencer
Clinton, Chas. Hutchins
Ebenezer, J. B. Slack
Ellerslie, R. Morgan
Eden, H. Cassiday
Elberton, B. Burch
Eathans, M. C. Fulton
Forsyth, O. Morse
Griffin, W. Lassiter
Greensboro, W. L. Strain
Hermitage, B. F. Walters
Iron Works, M. A. Cooper
Knoxville, Sam'l Rutherford
Kingston, H. A. Clemmons
Mulberry Grove, W. G. Walker
Macon, A. E. Ernst
Marietta, Edward Denmead
Madison, J. S. Walker
Milledgeville, E. Daggett
Mayfield, Thos. Jones
Mount Zion, R. Walcott
Midville, R. J. Morrison
Pinckneyville, Thos. H. Jones
Petersburgh, J. D. Watkins
Pondtown, P. Cook
Roswell, N. J. Bayard
Raytown, P. Davidson
Riceboro, W. S. Baker
Stelling's Store, G. A. Winn
Savannah, Dr. W. H. Cuyler
Sparta, J. H. Burnett
Stanfordville, J. Farrar
Thomaston, J. W. W. Drake
Upatoie, R. W. Carnes
Van Wert, D. Clopton
Waynesboro, M. Green
White Sulphur Springs, E. W. Packard
Washington, Jas. Wingfield
Zebulon, H. G. Johnson

ALABAMA.

Benton, Dr. G. P. Frierson
Berrien, Sam'l Ruffin
Crawford, J. Hurt
Eufaula, J. H. Dent
Greensboro, H. Watson
Huntsville, Jas. L. Watkins
Hayneville, H. M. Phillips
Hope, Jas. M. Bradford
Jacksonville, Jas. M. Cook
Livingston, James Hair
Montgomery, C. Cromelin
Montevallo, A. Gamble
Mobile, Dr. R. North
Morgan Springs, Geo. Cox
Montgomery, N Blue
Mount Meigs, Dr. T. B. Taylor
Mount Willing, S. Garrett
North Port, J. Bell
Pleasant Hill, Thomas Broughton
Port Gibson, H. N. Spencer
Pickensville, Jas. Chalmers
Pintalola, D. N. Gilmer
Russellville, W. W. Lucas
Sand Fort, B. Colvin
Suggsville, J. W. Pertis
Silver Run, S. G. Jenkins
Selma, Geo. C. Phillips
Salem, Jas. N. B. Lesseur
St. Stephens, J. Williams
Tuscaloosa, W. D. Marrast
Vellula, W. C. Dawson, jr.
Youngsville, Jos. Strickland, jr.
Warrior Stand, J. C. Henderson

MISSISSIPPI.

Brandon, S. C. Farrar
Black Hawk, J. Bailey
Bachelor's Bend, N. J. Nelson
Belmond, Dr. C. F. Dandridge
Como, J. W. Lumpkin
Cold Spring, R. H. Elam
Columbus, H. Stevens
Church Hill, Thos. Allein
Deer Brook, M. Nelson
Dranes Mills, W. R. Coleman
Edward's Depot, Dr. M. W. Phillips
East Pascagoula, B. M. Steadman
Fayette, P. K. Montgomery
Grand Gulf, Y Y. Berry
Gallatin, E. R. Brown
Homesville, J. T. Lamkin
Holley Springs, A. C. McEwen
Jackson, Maj. C. B. Green
Liberty, Hon. John Wall
Lexington, W J. Holloway
Middleton, W. W. Whitehead
Mount Pleasant, J A. Ventriss
Natchez, F. & J. Beaumont
Olive Branch, A. B. Cowan
Okachickama, Thos. Hardeman
Princeton, W. C. Jackson
Richland, Col. A. M. Mayo
Rodney, T. W. Beck
Raymond, C. F. Legrand
Rock Run, W. Bayless
Shongalo, Chas. Kopperl
Starkville, J. T. McGonney
Tippecanoe, R. D. Robinson
Vicksburg, R. Y. Rodgers
Whitesville, D. L. Phares
Washington, Thos. Affleck
Yazoo City, J. Ingersoll

LOUISIANA.

Assumption, J. Leftwick,
Bonnet Cane, Thos. May
Bordeaux, C. F. Voorhis
Clinton, Col. Theod. Gillespie
Donaldsonville, R. McCall
Franklin, W. S. Harding
Grand Cane, H. Rugeley
Houma, J. K. Nixon
Jackson, John Rist
Ketchi, W. B. Means
Keachie, C. A. Edwards
Monroe, Dr. J. Calderwood
Mansfield, A. Allen
New Orleans, B. M. Norman
New River, S. Tillotson
Natchitoches, S. M. Hyames
Plaquemine, A. Black
Springfield, Dr. G. Colmer
St. Joseph, J. G. Coleman
Spring Ridge, Dr. J. Wilder
Shreveport, M. Watson
Thibeaux, J. V. Donohue
Union, Jas. S. Hanna
Waterproof, J. G. Coleman
Woodland, A. W Poole

TENNESSEE.

Blair's Ferry, A. S. Lenoir
Bolivar, C. Jones
Cass, John Wood
Colliersville, S. I. Dunn
Cornersville, J. Rothrock
Cumberland Iron Works, A. G. Perkins
Camp Creek, S. E. Snapp
Chatteenooga, A. C. Richard
Durhamville, Thos. G. Rice
Franklin College, T. Fanning
Facility, J. T. Lenoir
Franklin, W. P. Campbell
Good Spring, Benj. D. Smith
Graysburg, W. Colson
Grove Mount, J. H. Fowlks
Greenville, E. Link
Hardiman's X Roads, J. S.Claybrook
Hill's Valley, J. B. Hill
Knoxville, D. P. Armstrong
Kingston, Jas. W. Lea
Leesburg, Isaac McPherson
Lenoirs, W. B. Lenoir
Louisville, Dr. M. Cox
Limestone Springs, John Love
Maryville, S. T. Bicknell
McMinnville, Rev. A. M. Stone
Memphis, Rev. S. Watson
Madisonville, Jas. A. Coffin
Mount Pleasant, W. McClinchy
Murfreesboro, C. T. Johnson
Manscoe's Creek, A. C. Cartwright
Nashville, Cameron & Fall
Philadelphia, W. F. Lenoir

Paperville, V. Beidlerman
Perryville, J. Taylor
Peytonsville, J. O. Crump
Purdy, F W. Gorrell
Railroad Plains, Benj. Bentley
Rogersville, Jas. L Fulkerson
St. Clair, J. Huffmaster
Spring Hill, J. Smith
Smith X Roads, R. F. McDonald
Tellico Plains, E. Johnson & Co.
Unionville, G. L. Poplin, p. m.
Unitie, E. Lee
Winchester, P. S. Decherd

KENTUCKY.

Athens, J. O. Pettit
Bedford, N. Parker
Brownsboro, J. F. Coons
Bowling Green, Jos. I. Younglove
Colbyville, S. D. Martin
Flower's Creek, Chas. How
Frankfort, A. C. Keenon
Flemingsburg, Maj. J. M. Howe
Ghent, I. Smithson
Garnetsville, Jas. Graham
Hendrewsville, J. G. Taylor
Henderson, Jas. Alvis
Harrodsburg, J. Brenan
Hodgensville, S. W. D Stone
Lexington, C. J. Sanders
Louisville, A. G. Munn
" Geo. W. Noble
Maysville, W. E. Neal
Nicholasville, Col. J. C. Wilmore
New Castle, Jas. M. Prewitt
Owensboro, J. Johnson
Piketon, J. N Richardson
Perryville, P. C. Latimer
Pratt's Landing, B. F. Crutchfield
Paducah, J. W. Jones
Smithland, J. Cowper
Shawnees Run, J. R. Bryant
Stephensport, Thos. Holt
Versailles, W. D Young

OHIO.

Akron, M. Arthur
Auburn, A. E. Barnes
Aetna, Sam'l Atkinson
Andover, T. Creary
Bristolville, L. B. Maltby
Burton, W. B. Miller
Brookfield, Jas. Fowler
Berlin, Jas. Otis
Braceville, F. E. Stow
Barnesville, I. T. Scholfield
Bloomingville, H. Becken
Brunswick, W. E. Woodward
Bainbridge, A. M. Marshall
Brandywine, Jas. W. Wallace
Bowling Green, W. R. Peck
Columbus, J. T. Blain
Cincinnati, W. H. Moore & Co., booksellers.
Chillicothe, W. C. Clark
Cuyahoga Falls, H. B. Tuttle
Conneaut, M. D. Plum
Chester, J. Cornell
Carthage, J. Martin
Cleveland, Stephens & Hitchcock
Cleves, W. H. H. Taylor
Cumberland, J. Foster
Columbus, J. Miller
Canfield, H. J. Canfield
Chester X Roads, D. Morrell
Circleville, Geo. Domy
Cheviot, J. McKnight
Canal Dover, Geo. W. Slinghuff
Canton, G. W. Hull
Delaware, Jos. Cellar
Dent, A. Orr
Dayton, S. Teague
Ellsworth, Jos. Coit
East Euclid, L. J. Pelton
East Claridon, C L. Taylor
Elyria, H. Ely
Fredericktown, Jas. George
Fitchville, M. E. Mead
Freedom, O. L. Drake
Fredonia, Geo. P. Howell
Franklin Furnace, I.W. Glidden
Grand Prairie, J. Fitzhugh
Grafton, E. M. Sibley
Girard, D. A. Adams
Gustavus, Geo. Hezlep
" Geo. Birrell
Granville, A. P. Prichard
Greenville, J. Spray
Greensburg, E. Wakefield
Gallipolis, A. Bickel
Gambier, M. White
Hillsboro, J. Barry
Huron, P. Adams
Hudson, H. Baldwin
Harrisville, D. Binns, jr.
Harrison, S. Shullisk
Hildreths, I. Baxter
Houston, S. Richardson
Jefferson, E. Wood
Kinsman, J. R. Stanhope
Kirtland, A. C. Russell
Kingston, M. Taylor
Kalida, H. S. Knapp
Lafayette, Benj. G. Calef
Lower Sandusky, W. M. Stark
Lancaster, J. M. Bigelow
Leroy, J. Phillips
Lenox, Joseph Atkins
Lebanon, P. Boyd
Malta, R. Porter, jr.
Moore's Salt Works, Robert George
Monroeville, Isaac Smith
Mogadore, P. Monroe
Middlebury, T. A. Noble
Morgan, A. Moses
Mount Vernon, W. H.Whitton
Milan, Chas. Wilber
Marion, W. L. Kendrick
Medina, R. Chappell
Marietta D. E. Gardner
Massillon, C. Wesener
Mount Healthy, J. T. Nathorst
Mear's Farm, Thomas Raffington
Norwalk, I. D. Burditt
New Lisbon, Jno. B. Trunick
New Vienna, C. Lewis
North Perry, J. Parmly
New Philadelphia, F. D. Leonard
Newark, Geo. W. Pinney
Newton Falls, R. A. Burbank
Nashville, S. Diefendorf
Oberlin, H. C. Taylor
Orangeville, N. E. Austin
Ohio City, Jas. Wenham
Parkman, S. I. Curtis
Palmyra, A. Merwin
Pleasant Hill, M. Teague
Poland, W. Little
Pittsfield, W Reed
Painesville, C. Huntington
Peru, Sam'l Atherton, 2d
Piqua, Steph. Widney
Quaker Bottom, J. Proctor
Republic, E West
Roseville, J. T. Ford
Randolph, O. C. Dickinson
Ruggles, N. Sutherland
Rock Port, Geo. B. Merwin
Reading, S. Shepherd
River Styx, A. Badger
Rutland, Steph. Ttitus
Shelby. J. Gambell
Springfield. J. T. Warder
Steubenville, F. A. Wells
Sharonville, L. Morse
Springdale, A. A. Mullett
Summer Ford, J. Deland
Sandusky, F. Morgan
Selma, J. Landes
Short Creek, J. Romick
Salem, W. Kirk
Springboro, W. Silvers
Troy, P. A. Smith
Tremainsville, P. Runkle
Tiffin, A. Rawson
Toledo, S. B. Warden
Tallmadge, D. Upson
Twinsburg, E T. Richardson
Urbana, J. Funk
Uhrichsville, J. Barker
Vienna X Roads, W. R. Webb
Vienna, S. H. Reed
Willoughby, Geo. Howliston
Wellsville, J. Robinson
Walhonding, J. Johnson
Wakeman, J. E. Hunford
Wayne, John Kennedy
West Milton, M. Pearson
Wadsworth, Geo. K. Pardee
Williamsfield, Dan'l Smith
West Jefferson, George McDonald
Warren, J. W. Collins
Watertown, D. Deming
Xenia, J. G. Gest
Zanesville, Jas. L. Cox
Zelienople, C. S. Passavant

INDIANA.

Boon Grove, A. B. Price
Bristol, George Senior
Centreville, A. Vaughan
Canton, O. Albertson
Elizabethtown, Isaac Cox
Greenville, W. S. Farmer
Goshen, A. Byres
Kingsbury, J. T. Vail
Lafayette, H. L. Ellsworth
Laconia, J. Kintner
Lauramie, J. R. Richards
Lima, M. Averill
Mishawaka, Chas. N. Ryan
Michigan City, George Smith
Madison, Thos. B. Spilman
Mount Pleasant, Jas. M. Rawlins
Mount Vernon, A. S. Osborn
New Harmony, R. Owen
New Albany, D. Hedden
New Garden, Geo. S. Doxey
New Maysville, R. Biddle
New Durham, M. Barnard
Orleans, J. F. Kimbley
Princeton, John Arbuthnot
Richmond, Robt. Hatton
Romney, H. Darning
Rockville, I. J. Silliman
South Bend, D.W.C.Willoughby
South Gate, J. Williamson
Steubenville, James Carter
Salem, N. Morris
Terre Haute, M. Pettengill
Vevay, Jas Walton
Whitley, H. McLallen
Willmington, J. D. Lawrence

ILLINOIS.

Antioch, Dan'l Homes
Addison, M. L. Dunlap
Brimfield, J. S. Hirst
Belleville, J. M. Roeder
Brighton, Southwick & Wright
Bunker Hill, J. A. Pettengill
Batavia, Jos. McKee
Bristol, E. S. L. Richardson
Como, F. Cushing
Chicago, Chas. D. Smith
Dundee, J. A. Carpenter
Dixon, John Shillaber
Godfreys, Benj. Godfrey
Grand View, Jas. Hite
Galena, W. Gillet
Geneseo, H. C Sleight
Joliet, M. Benjamin
Jonesboro, E. Willard
Knoxville, N. Goodell
Kishwaka, Jos. B. Hagaman
Lockport, E. E. Bush
Long Grove, O. Ott
Lewistown, Steph. Dewey
Mount Morris, A. Lackridge
Naperville, L. Ellsworth
Nauvoo, Jos. L. Haywood
Ottawa, H. L. Brush
Princeton, C. Bryant
Paddock's Grove, G. Flagg
Paris, M. K. Alexander
Peoria, Chas. W. Denton
Quincy, L. Bull, jr.
Rockford, W T. Lord
Rock Island, Thos. L. Dunn
Sugar Grove, G. White
Staunton, O. G. Moulton
Thornton, John Millar
Tremont, W. Pettes
Upper Alton, Dr. B. F. Long
Vermillionville, Sam'l S. Hall
Woodburn, W. H. Rider

MISSOURI.

Austin, L W. Platt
Boonville, Jas. R. Hammond
Danville, D. W. Baker
Fee Fee, J. S. Quisenberry
Glenfinlas, W. Frissall
Georgetown, R. Gentry
Jefferson City, Jas. L. Minor
Lexington, C. Patterson
Palmyra, G. W. Berkley
Rock Hill, C. Armstrong
St. Louis, E. P. Pettes
" Plant & Brothers
Springfield, Hon. J. S. Phelps
West Ely, Rev. J. Blatchford
Watenham, Jas. Miller

MICHIGAN.

Adrian, A. Whitney
Ann Arbor, W. S. Maynard
Armada, Geo. Andrews
Bellevue, C. G. Sprague
Battle Creek, H. B. Denman
Columbia, O. R. Clark
Constantine, W. O. Fisk
Centreville, G. Talbot
Dundee, I. Scrantom
Dexter, Hon. S. Dexter
Detroit, E. Ives
Dearbornville, R. McDonohue
Erie, A. J. Keeney
Elba, H. N. Peck
Franklin, R. C. Kyle
Flat Rock, John Cook
Farmington, W. E. Pier
Grand Rapids, J. F. Chubb
Groveland, N. T. Elliott
Gilead, D. Willson
Howell, F. C. Whipple
Hudson, H. Clement
Jackson, O. C. Freeman
Ionia, Benj. Harter
Keewawenon, B. F. Rathbun
Lexington, M. Carrington
Lambertsville, L. Lambert
Marshall, S. A. Tyler
Manchester, S. N. Palmer
Mount Clemens, H. R. Babcock
Marion, L. E. Beach
Monroe, W. Hanson
North Vernon, Jos. Parmenter
Onondaga, C. M. Maynard
Oneida, E. Astley
Plainwell, C. C. White
Plymouth, W. T. Hedden
Paw Paw, J. Smith, p. m.
Palmyra, Q. W. Pomeroy
Pontiac, J. B. Davis
Pinckney, L. D. Smith
Romeo, A. Streeter
Redford, Chas. Betts
Rexford, W. Hartsough
Rawsonville, John Lake
St. Joseph, W. C. Allen
Salina, T. L. Humphreyville
Sylvan, Isaac Denman
Saugatuck, D. G. Platt
Superior, John Brewer
St. Clair, A. S. Palmer
Shiawassee, D Bush, jr.
Washington, D. Cooley
Ypsilanti, Fras. Clarke

ARKANSAS.

Beattie's Prairie, R B. Daniel
Choctaw Agency, T. McKinney
Eagletown, L. G. Harris
Evansville, D. Hanna
Fort Towson, L. Garland
Fort Washita, Rev. W. Browning
Hillsboro, W. Gorman
Park Hill, Rev. Steph. Foreman
Sylvia, Rev. E. Jones
Ultima Thule, L. G. Harris
Wheelock, H. H. Copeland
Wilmington, Dr. O. Sugg

FLORIDA.

Marion, Jas. C. Johnston
Marianna, I. & W. Keyes
Mandarin, J. L. Hamilton
Tallahassee, R. W. Williams
Key West, J. B. Browne

WISCONSIN.

Beloit, M. P. Cogswell
Clinton, T. Winch
Caledonia, E. W. Warner
Ceresco, R. C. Richardson
Delavan, F. K. Phœnix
Darien, C. D. Long
Fond Du Lac, C. J. Allen
Gibbsville, S. Burr
Janesville, J. F. Willard
Kaposia, W. R. Brown
Madison, Fred'k Starr
Milwaukie, C. Shepherd
" J. A. Hopkins
Mineral Point, A. W. Parris
New Diggins, R. H. Champion
Osh Kosh, F. W. Doane
Oak Creek, E. D. Phillips
Oconomowoc, J. Metcalf
Patch Grove, T. P. Burnet
Pleasant Prairie, H. Foot
Platteville, E. F. Mitchell
Palmyra, W. S. Peck
Racine, W. J. Hunt
Sheboygan, S. B. Ormsbee
Summit, E. Stansbury
Shullsburgh, Robt. Allison
Southport, J. Bond
Taylorsville, Sam'l Taylor

Therese, N. M. Juneau
Watertown, James Plocker
Waushara, D. Lindsay
Warren, W. R. Warren
White Oak Springs, J. W. Blackstone

IOWA.

Burlington, Fred. Coolwine
Davenport, Jas. Grant
Dubuque, R. Spalding
Fairfield, R. Rice
Hawkeye, Jas. Bradley

CANADA EAST.

Abbottsford, Jos. Drake
Barnsboro, A. Vickers
Beloeil, A. Vandandaigne
Compton, S. I. Pomroy
Danville, W. M. Byrd
Durham, S. Stevens
East Farnham, Sam'l Wood
Fitzroy Harbor, W. T. Taylor
Grantham, R. W. Watts
Hawksbury, W. Thomson
Kingsey, G. S. H. Browne
La Chute, Jas. McAdam
Lockaber, S. B. Whitcomb
Montreal, J. H. Scott
" R. W. Lay
Murray Bay, I. Navine
Medonte, John Craig, p. m.
Nicolet, W. Woodward
Port Neuf, A. McDonald
Petite Nation, A. Cook
Quebec, Fred. Wyse
Rignard, M. F. Whiting
Richmond, R. M. I. Bernerd
St. Therese, John Morris
St. Stanislaus, J. Broster
St. Hyacinthe, H. G Forsyth
St. Thomas, W. Patton
Stanstead, H. B. Terrill
St. Christville, Mr. Bowman
St. Hilliare, Maj. Campbell
St. Antoine, C. Cartier
St. Mark, C. Prefontain
Terrebonne, A. Webster
Wickham, J Ralph
West Shefford, Wm. Gibson
Yamaska, J. Wortele

CANADA WEST.

Amherstburgh, R. H. B. Elliot
Alexandria, Alex. Chesholm
Barrie, Jas. G. Mickens
Bath, L. Laslin
Brockville, Chas. Booth
Bytown, G. W. Baker
Camboro, C. Clarke
Carlton Place, R. Bell
Caledonia Springs, P. Sterling
Colchester, Thos. Hawkins
Dundas, J Lesslie
Dunnville, W. Inman
Dawn Mills, H. Wilson
Etobicoke, W. Lane
East Hawksbury, Rev. J. Metcalf
Easton's Corners, C. W. Davies
Glanford, J. Terryberry
Goderich, A Montgomery
Gananoque, J. L. Macdonald
Galt, W. Rosebrough
Gosfield, Jos Strong
Guelph, J. Harland
Hamilton, E. Clark
Kingston, Thos. Briggs, jr.
L'Orignal, C. P. Treadwell
McKillop, Jas. Dickson
Newmarket, Thos. Cosford
Nauticoke, Sam'l Gamble
Oxford, Chas. Chadwick
Paris, R. & W. Gordon
Port Dover, Thos. Waters
Pictou, Phillip Low
Port Hope, D. Smart
St. Andrews, Geo. A. Hay
Sandwich, Chas. Elliot
Simcoe. H. Groff
Scarborough, J. P. Wheeler
Seneca, Rob't Mehaffey
Three Rivers, S. Macauley
Toronto, L. R. Marsh
Tuckersmith, E. Ledyard
Vittoria, George I. Ryerse
York, W. Fearman

NOVA SCOTIA.

Annapolis, Judge Ritchie
Bridgetown, W. H. Morse
Cornwallis, C. C. Hamilton
Kentville, W. H. Chipmore
Wolfville, C. W. H. Harris
" Hon. C. K. Prescott

NEW BRUNSWICK.

Fredericton, J. H. Reid
Hampton, Jas. Keator
Kingston, Geo. Raymond
St. John, S L. Tilley
Sackville, I. W. McLeod
St. Andrews, Jos. Walton
Woodstock, Chas. Perley

SYRACUSE NURSERY.

THE subscribers would call the attention of the public to their extensive and well selected assortment of Fruit and Ornamental Trees, consisting of

200.000 Grafted Apple Trees, from 1 to 5 years' growth, 60,000 of which are from 6 to 9 feet high; 3 to 5,000 of the celebrated Northern Spy, 4 to 8 feet high, can be supplied without extra charge to those ordering other varieties.

6 to 8,000 Pear Trees, 4 to 7 feet high.

A few hundred of the Onondaga, and Van Mon's Leon Le Clerc, (very thrifty,) can be supplied, of one and two years' growth, from 50 cts. to $1.00 each.

1.000 Cherry Trees, 6 to 9 feet high.

10 to 15.000 Peach Trees, of the best early varieties, thrifty and free from disease.

Apricots and Nectarines, a good supply.

3 to 500.000 Apple Seedlings, from two to three years old, and unusually large.

Also, a large quantity of Horse Chestnut, Ailanthus, and Mountain Ash, of extra size, and good form, together with all the desirable varieties of the Grape.

All post-paid communications and orders containing remittances, promptly attended to. THORP & SMITH.

Syracuse, N. Y., Nov 1—6t.

SPANISH MERINO SHEEP.

FOR sale a few choice Merino sheep—bucks and ewes—of undoubted purity of blood, and a quality that will give satisfaction to purchasers. They can be sent west by canal, at the subscriber's risk. R. J. JONES.

Cornwall, Vt., June 1, 1847.—tf.

TAR PAINT AND LIME.

TAR PAINT for sale at the Albany Gas Works: A *very cheap* article for covering barns, &c.

LIME for sale at the Albany Gas Works, *cheap*.

Oct. 1—6t.*

GRANT'S PATENT FAN MILLS.

THE right to manufacture these celebrated mills can be obtained of the subscriber, at Junction P. O., Rensselaer Co., N. York. He also gives notice that he shall prosecute all persons who in any manner infringe upon his patent. I. T. GRANT.

Junction P. O., Rens. Co., N. Y., Sept. 1, 1847—4t.

HORSE POWER, THRESHER, AND CORN SHELLER DEPOT.

ORDERS for the "Warren's and Trimble's *best* two and four Horse Powers and Threshers," Hand Threshers, Waterman's Corn Shellers, and other Agricultural Machinery, at wholesale and retail, will continue to be promptly attended to, as heretofore, by the subscribers at No. 5 Burling Slip, and 126 Pearl-st., New-York city. Nov. 1, 1847.—8t. JAMES PLANT & Co.

10,000 Copies in Four Months.

COLE'S AMERICAN VETERINARIAN,

OR Diseases of Domestic Animals, showing the Causes, Symptoms, and Remedies, and rules for restoring and preserving health by good management, with full directions for Training and Breeding, by S. W. COLE, Esq.

This is emphatically a book for every farmer, and no farmer's library is complete without it. The demand for TEN THOUSAND COPIES in the short space of four months, speaks volumes in favor of the work. The farmer has in this neat and compact volume, a complete ENCYCLOPEDIA, in which he may find the whole subject of the Treatment of Domestic Animals, familiarly discussed, and rules and remedies fully and clearly prescribed.

Highly recommendatory notices have been received from many of the most distinguished Farmers and Editors in the country. The following short extracts show in what estimation the work is held.

[From Ex-Governor Hill of N. H.]

"Mr. Cole has shown himself well qualified for the compilation of this work. We understand that it has already had a free and extended sale; many times its price to almost any farmer, may be saved in its purchase."

[From J. M. Weeks, of Vermont.]

"The American Veterinarian is the best book of the kind I have ever seen. Every Farmer ought to have one."

[Christian Mirror, Portland.]

"We think no farmer would willingly be without this book after glancing at the Table of Contents."

[Albany Cultivator.]

"This will be found a useful book. It speaks of diseases under the names by which they are known in this country, and the remedies prescribed are generally within the reach of every farmer, and may frequently be found on his own farm. We second the suggestion that it should be in the hands of every farmer."

[American Agriculturist.]

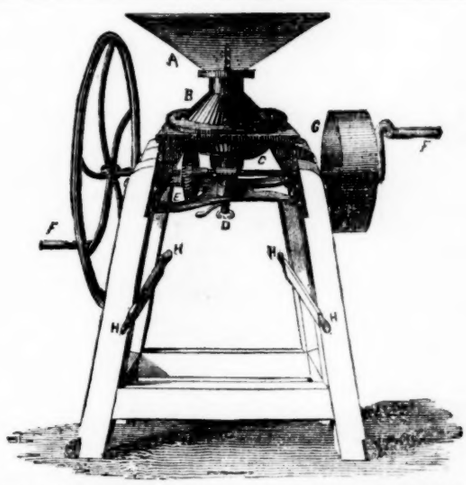
"We recommend to all who keep Domestic Animals to procure Mr. Cole's new book. The lives of many valuable animals might be saved by following his directions."

The price of this valuable book, finely bound in leather, is 50 cents.

WANTED—50 active, intelligent, and enterprising agents, to sell this work, two in each State in the Union. A small capital of from $25 to $50, will be necessary for each Agent. Address, POST-PAID, the publishers. JOHN P. JEWETT & Co.

October 1—3t. 23 Cornhill, Booksellers' Row, Boston.

☞ The above work is for sale at the office of the Cultivator.



JOHN MAYHER & CO.'S NEW SELF-SHARPENING CORN, COFFEE, AND SPICE MILL.

THE above cut shows the construction of our Premium Mill for Grinding Corn, Oats, Coffee, Spices, &c., &c. It is considered highly valuable for its simplicity of construction, durability, and its adaptation for farmers, planters, and grocers. It may be operated by hand or horse power, and will grind from four to five bushels of good meal per hour, and from 300 to 400 lbs. of coffee or spice per hour. Price, from $28 to $30. We also have for sale a smaller mill for the same purpose, which will grind from 1½ to 2 bushels of corn per hour, and from 90 to 100 lbs. of coffee per hour. Price from $5 to $6. JOHN MAYHER & CO.,

United States Agricultural Warehouse,

Oct. 3—3t. No. 195 Front, near Fulton-st., N. Y.

CONTENTS OF THIS NUMBER.

COMMUNICATIONS.

False Theories in Relation to Bees, by M. QUINBY,..... 367
Notes of a Traveller in England and Wales, by H.,..... 370
Rural Notices Abroad, by IK. MARVEL,..... 371
Application of Salt to Plum Trees, by H. W. CROSBY—Banking up the Trunks of Trees, by D. L. SUYDAM,..... 375
History of the Cast Iron Plow, by J. J. T.,..... 378
Topping Corn, by D. T.—Improved Bull Ring, by J. W. RUSSELL,..... 379
Machine for kneading Dough, by J. A. C.—Horse-Powers, by R. CHISOLM,..... 380
Lucerne—Mutton—Grasses for the South, by R. CHISOLM—Rotation of Crops, by J. D. BURDITT—Morgan Horses, by B. THURSTON,..... 381

EDITORIAL.

Sketches of Massachusetts Farming—Culture of Tobacco,.... 361
Improvement of Sandy Lands,..... 362
High Cultivation—Book Farming, &c.,..... 363
On the Principles of Breeding,..... 364
Reports of Committees of Agricultural Societies,..... 366
Running Out of varieties—Change of Seed—Cure for Bite of Mad Dog—Good Black Ink,..... 369
Rust in Wheat—Preparing for Wheat,..... 371
Characteristics of the Past Season,..... 372
Notices of New Publications,..... 373, 386
Age of Cattle and Sheep,..... 374
The Cherry Plum—Winter Apples in Ohio—Profits of Fruit,. 375
The Cultivator to its Readers. Correspondents and Agents,.... 376
Broadcast Sowing Machine—Exhibitions of Ag. Societies,... 377
Breeding Animals—Influence of Railroads,..... 381
Answers to Inquiries,..... 382
To Correspondents—Monthly Notices, &c.,..... 383

ILLUSTRATIONS.

Fig. 83—The Cherry Plum,..... 375
Fig. 84—Broadcast Sowing Machine,..... 377
Fig. 85—Improved Bull Ring..... 379
Fig. 86—Dough-kneading Machine,..... 380

FARM FOR SALE.

SITUATED at West Galway, Saratoga Co., consisting of 122 acres, of which 82 acres are in a high state of cultivation, well fenced and well watered; the balance is heavily timbered woodland. On the premises are a good assortment of fruit trees, a dwelling house, and all necessary and convenient out buildings, in good order. The house is situated in a large grove of forest trees, —is 15 miles from Schenectady, and 8 from Amsterdam village. Inquire on the premises, of H. BOGGS.

Dec. 1—1t.*

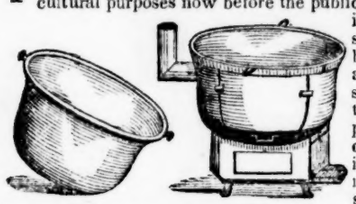
TO NURSERYMEN.

A PERSON possessing an interest in a nursery establisement well located for business, near Albany, wishes to dispose of the same on account of other constant occupation. To a Nurseryman who can bring good recommendations of integrity and efficiency, this interest, with a lease of the ground, will be sold on reasonable terms. The present owner has an extensive acquaintaince, and will exer this influence for the benefit of the purchaser, either in the sale of trees, or procuring new or desirable varieties of fruit.

Inquire of CHARLES DOWNING, Newburgh, or L. TUCKER, Albany. Dec. 1—2t

MOTT'S AGRICULTURAL FURNACE.

THE cut represents the most approved portable furnace for agricultural purposes now before the public. It is formed of cast iron, and is of itself both stove and boiler. The boiler is shown in the cut as detached from the stove; its form is such that the fire passes completely round the kettle or boiler, the space being some two or three inches between the outside or stove and the boiler. This causes the water to boil very quickly, and with very little fuel; saves all the expense of masonry and brickwork, as a funnel or stove pipe is all that is necessary to give it a draft for all purposes. They are admirably adapted to boiling or steaming vegetables and food for stock, and are convenient for many other purposes where large quantities of water are required to be heated. The following are the manufacturer's retail prices; they can be furnished both wholesale and retail.



15	gallons,	complete,....	$9 00	60	gallons,	complete,...	$23 00
22	"	"	12 00	80	"	" ...	30 00
30	"	"	15 00	90	"	" ...	35 00
40	"	"	18 00	120	"	" ...	50 00
45	"	"	20 00				

For sale at Albany Ag. Warehouse. L. TUCKER.

Dec. 1. 1847.

POULTRY FOR SALE.

GOLDEN and Silver Top-knots, very beautiful—also pure white Top-knots, and Bantams. Price. $3 per pair.

Also, one pair pure China Geese, (price $5,) and one pair white Top-knot Ducks, price $3. Inquire at the Ag. Warehouse, No. 10 Green-st., Albany.

Dec. 1, 1847.—1t.

COUNTRY SEAT FOR SALE.

THE elegant Country Seat, situate in the town of Livingston Columbia county, on the New-York and Albany post-road distant about nine miles southeast from the city of Hudson, and four miles east from the river—the late residence of Joseph W. Russell, deceased. The place consists of about 95 acres of highly cultivated land, and is well stocked with a great variety of choice fruit. The house is a substantial brick building, 60 feet by 40, well supplied with water from a large brick filtering cistern. The barns, carriage-house, ice-house, and other out-buildings, are large and commodious.

There are upon the place, wells and springs of pure water, at convenient distances from the house and barns.

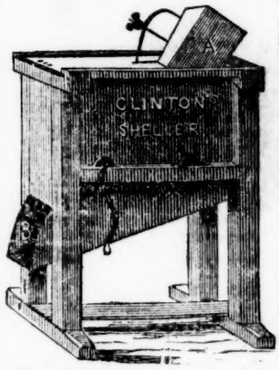
The village of Johnstown, which is but a quarter of a mile distant, contains a church, school, post-office, &c.

For terms and other particulars, enquire of

Albany, Dec. 1—6t. W. E. BLEECKER.

CLINTON CORN-SHELLER.

THE accompanying cut is a good view of the single hopper and single balance-wheel machine. This is believed to be one of the most efficient and durable shellers ever used as a hand sheller, having been in use for the last ten years or more, and having had some slight improvement it still stands at the head of the list of shellers for ease of operation, amount of work and durability. With two men, two hundred bushels of ears are easily shelled per day, or with two hoppers and large balance wheels, double that amount can be done with three men. It is equally well adapted for the large ears at the south and west as for the small ears at the north. Some have a balance wheel on each side; this balances the machine a little better, and the wear of the shafts is more equal and durable. It is about one and a half by two and a half feet on the floor, and three and a half feet high; with the single hopper it weighs about 100 pounds; with double hopper and balance wheel, it weighs about 150 pounds. Price, with a single hopper, $10; with a double hopper, $13. Warranted satisfactory. For sale at the Albany Ag. Warehouse. L. TUCKER.



Dec. 1, 1847.

RURAL PUBLICATIONS.

THE CULTIVATOR, a monthly journal of Agriculture, Horticulture, and Domestic Economy, published at Albany, N. Y., by LUTHER TUCKER. Single copies $1 a year. To Clubs or Agents, seven copies for $5—Fifteen copies for $10, and at the rate of three copies for $2, for all over 15 copies. This work has now been published fourteen years, with a constantly increasing popularity among the farmers of every part of the United States. The volume for 1848, will commence on the 1st of January, at which time all subscriptions for the year should commence.

THE HORTICULTURIST, *and Journal of Rural Art and Rural Taste*, a monthly magazine, edited by A. J. DOWNING, Esq., of Newburgh, well known as the author of "Landscape Gardening," "Cottage Residences," "Fruits and Fruit Trees of America," &c., and published at Albany, by LUTHER TUCKER,—price, $3 a year—20 per cent discount to Agents. The first vol. of this work was completed with the June number for 1847, and with the back numbers of the 2d vol., now in course of publication, can be furnished to all new subscribers. The Horticulturist embraces in its scope, the Description and Cultivation of Fruits and Fruit Trees, Ornamental Trees, Shrubs and Plants—Designs for Rural Cottages, Farm Houses, Lodges, Ice Houses, Vineries, &c.,—Landscape and Ornamental Gardening, and all matters of interest to the horticulturist, and should be in the hands of all who desire to enrich and beautify their residences by the comforts and adornments of rural art and rural taste.

Postmasters and others having a taste for rural pursuits, and disposed to aid in circulating correct information upon rural subjects, are invited to act as Agents for the above publications. All letters to be addressed to LUTHER TUCKER, Publisher, Albany, N. Y.

THE CULTIVATOR

Is published on the first of each month, at Albany, N. Y., by

LUTHER TUCKER, PROPRIETOR.

LUTHER TUCKER & SANFORD HOWARD, Editors.

$1 per ann.—7 copies for $5—15 copies for $10.

Payable always in advance.

PUBLISHING AGENTS IN

NEW-YORK—M. H. Newman & Co., 199 Broadway;
BOSTON—Joseph Breck & Co., 52 North-Market-Street;
PHILADELPHIA—G. B. Zieber & Co., Booksellers:

Of whom single numbers, or complete sets of the back volumes, can always be obtained.

☞ ADVERTISEMENTS inserted in the Cultivator, at the rate of $1.00 per 100 words, for each insertion.